City of Lafayette Staff Report

For: Lafayette City Council

By: Christine Sinnette, Senior Planner

Date Written: April 4, 2008

Meeting Date: April 14, 2008

Subject: Public hearing and adoption of Resolution 2008-15 (previously Ordinance No. 571) ratifying Ordinance No. 2007-47 of the Contra Costa County Fire Protection District adopting amendments to the California Fire Code

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Introduction

On January 28, 2008, the City Council introduced Ordinance No. 571 adopting by reference Ordinance No. 2007-47 of the Contra Costa County Fire Protection District adopting amendments to the California Fire Code. The Ordinance was continued to the City Council meeting of April 14 for a public hearing and adoption. Since January 28, 2008, staff has been reviewing Ord. 2007-47 with the City Attorney. It was decided that ratification of Ord. 2007-47 by resolution pursuant to section 13869.7, Health and Safety Code, was the proper way to consider it. Therefore, the project is now Resolution 2008-15 and Ordinance 571 has been retired without consideration.

Staff Comment and Analysis

The 2007 California Fire Code became effective January 1, 2008. Although this code applies statewide, Health and Safety Code sections 17958.5 and 18941.5 authorize a local jurisdiction to modify or change this code and establish more restrictive standards if the local jurisdiction finds that the changes and modifications are reasonably necessary because of local climatic, geological or topographical conditions. The Contra Costa County Fire Protection District (District) reviewed the statewide code and recommended that it be adopted with amendments based on local climatic, geological and topographical conditions. On December 4, 2007, the County Board of Supervisors, acting as the governing body for the District, adopted Ordinance No. 2007-47 adopting the California Fire Code with amendments based on local conditions (see Attachment A). Most of the amendments in Ord. 2007-47 are the same that were previously adopted by the County (Ord. 2002-32).

Resolution 2008-15 would ratify Ordinance No. 2007-47. Since the Council meeting in January, staff has spend time studying the Ordinance and going over it with District

personnel in order to fully understand what was being amended in the CFC and why. One thing that has been made clear is that although the CFC became effective January 1, the administrative provisions of Appendix Chapter 1 have to be adopted locally. Unless the City adopts the appendices directly or ratifies Ord. 2007-47, the City will be directly responsible for administering the CFC including weed abatement, commercial inspections, and development plan review. The major amendments included in Ord. 2007-47 are outlined below. Also see Attachment B – District Correspondence and Attachment C – District Findings.

Chapter 2. Definitions. Definitions specific to Contra Costa County have been added to the California Fire Code (CFC).

Chapter 3. General Precautions Against Fire. The provisions of Chapter 3 in the CFC govern the occupancy and maintenance of structures and premises for precautions against fire and the spread of fire and include combustible waste material, open burning and recreational fires, smoking, and storage of combustible equipment and materials. Ord. 2007-47 adds section 316 to Chapter 3 to give jurisdictional authority to the District for abatement of hazards created by growth of weeds or other growth capable of being ignited and adds section 317 to address hazards of automobile wrecking yards.

Chapter 5. Fire Service Features. Chapter 5, CFC, provides general specifications for fire access roads and water supply and, for the most part, authorizes the local fire official to determine the specific standard. For example, section 503.1.2 authorizes the local fire official to require more than one access road. Section 503.2.7 states that the grade of the access road shall be within the limits established by the fire code official based on the fire department's apparatus. Ord. 2007-47 amends Chapter 5 by adding a definition for all-weather driving surface, and provides specific standards for access to residential development and open spaces, fire equipment turnouts, parking on fire roads, roadway grades, and water supply. The standards in Ord. 2007-47 are the same standards the District has been using for the last 15 to 30 years.

Chapter 9. Fire Protection Systems. Chapter 9, CFC, requires automatic sprinkler systems based on occupancy type and typically requires their installation if one of several situations occurs. For example, automatic sprinklers would be required for a Group A-2 occupancy if the fire area exceeds 12,000 square feet, or the fire area has an occupant load of 300 or more, or the fire area is located on a floor other than the level of exit. Ord. 2007-47 generally requires automatic sprinklers when the floor area exceeds a certain floor area and does not allow for alternate conditions such as occupancy load or location. It should be noted that although Table 903.2 requires automatic sprinklers for all "R" occupancies, there are currently no standards. Section 903.2.7 on page 13 of Ord. 2007-47 states that Group R[1] shall meet the requirements of section 903.2.7., CFC, which excepts detached one- and two-family dwellings not more than three stories above grade from sprinkler requirements. It is the District's intent to prepare recommendations for residential sprinklers later this year and present them to Contra Costa County

[1] Group R includes residential occupancies such as boarding houses, hotels, apartments, single-family homes, townhouses, and residential care facilities.

jurisdictions for adoption. Adoption of Resolution 2008-15 will have no effect on the City's current residential sprinkler ordinance.

Chapter 14. Fire Safety During Construction and Demolition. Like Chapter 5, Chapter 14, CFC, contains general specifications and minimum safeguards for fire safety for construction, alteration, and demolition operations. Ord. 2007-47 provides specific standards for emergency vehicle access and water supply. For example, section 1412, CFC, simply states that an approved water supply for fire protection, either temporary or permanent, shall be made available as soon as combustible material arrives on the site. Ord. 2007-47 amends section 1412 and requires specific standards for temporary water supply including holding capacity and availability to fire apparatus.

Appendices. As stated in the CFC, provisions in the appendices shall not apply unless specifically adopted. In order to enforce the CFC and Ord. 2007-47, certain appendices need to be adopted. Ord. 2007-47 adopts and amends Appendix Chapter 1, Appendix Chapter 4, Appendix B, Appendix C, Appendix C, Appendix E, Appendix F, and Appendix G. As amended, the appendices establish the duties of the District, require operational permits for certain uses and activities like Christmas tree sales and building demolition, provide a process for appeals, specify fire-flow requirements, fire hydrant locations, and access road standards.

At the January meeting, the City Council requested staff to review Orinda and Moraga ordinances as they relate to residential fire sprinklers. Upon review of the ordinances, discussions with District personnel and correspondence from Councilmember Andersson (see Attachment D), staff suggests that review of the City's current residential sprinkler ordinance (Chapter 3-5, LMC) not be taken up at this time.

The City Council expressed concern with some of the fire service features and standards in Ord. 2007-47. Except for an increase in the minimum turning radius for an access road (section 503.2.8), the standards are the same ones the District has been requiring for 15 to 30 years. In the past, the District has worked with property owners to provide alternate mitigation to correct situations that do not conform to District fire safety standards. It is expected that the District will continue to follow their policy of cooperation if Lafayette adopts Ord. 2007-47. In fact, section 104.9 Appendix Chapter 1, CFC, authorizes the fire code official to approve an alternative material or method of construction where the fire code official finds that the proposed design is satisfactory and complies with the intent of the provisions of this code.

Although certain parts of Ord. 2007-47 may warrant closer review, staff is recommending that Ord. 2007-47 be ratified as is so the District can continue to provide fire protection services such as weed abatement.

Staff has recently found out that other cities in Contra Costa County are also concerned with some of the provisions of Ord. 2007-47 and the lack of input during District preparation of the Ordinance. To that end, city building officials and staff will soon be meeting to discuss Ord. 2007-47 and other District standards. As noted in section 1 of

the Resolution, the City of Lafayette will continue to review Ord. 2007-47 and may make future modifications.

CEQA

Adoption of Resolution 2008-15 and the provisions it contains are exempt from the California Environmental Quality Act pursuant to California Code of Regulations, §15061(b)(3) because this project is covered under the general rule that CEQA applies only to projects that have the potential for causing a significant effect on the environment. Adoption of Resolution 21008-15 and the administrative code provisions it contains have no potential for causing an effect on the environment.

Conformity with the General Plan, Specific Plans, and the Zoning Ordinance

The proposed adoption of Resolution 2008-15 and its provisions have no direct effect on the general plan, any applicable specific plans, or the zoning ordinance.

Recommendation

Conduct public hearing and adopt Resolution 2008-15 ratifying District Ordinance 2007-47.

Attachments

A. Contra Costa County Fire Protection District Ordinance No. 2007-47
B. Correspondence from Contra Costa County Fire Protection District, dated December 4, 2007, February 6, 2008, March 5, 2008
C. Contra Costa County Fire Protection District Findings in Support of Changes, Additions and Deletions
D. Correspondence from Brandt Andersson, dated March 2, 2008

BEFORE THE CITY COUNCIL OF THE CITY OF LAFAYETTE

In the Matter of:

Resolution 2008-15 Ratifying Ordinance No. 2007-47 of the Contra Costa County Fire Protection District adopting amendments to the 2007 California Fire Code	)	Resolution 2008-15

The City Council of the City of Lafayette does resolve as follows:

SECTION 1. RATIFICATION OF CONTRA COSTA FIRE PROTECT DISTRICT ORDINANCE NO. 2007-47.

Ordinance No. 2007-47 of the Contra Costa County Fire Protect District ("District'), adopted December 4, 2007, is hereby ratified by the City Council of the City of Lafayette under the authority of Health and Safety Code section 13869.7. Ordinance No. 2007-47 adopts the 2007 California Fire Code (California Code of Regulations, Title 24, Part 9 [based on the 2006 International Fire Code published by the International Code Council]), including Appendix Chapter 1, Appendix Chapter 4, Appendix B, Appendix C, Appendix D, Appendix E, Appendix F, and Appendix G, as amended by the changes, additions and deletions set forth in the ordinance. As of the effective date of this resolution, the provisions of the 2007 California Fire Code are controlling and enforceable within the limits of the City of Lafayette.

In ratifying the provisions of Ordinance No. 2007-47, the City Council of the City of Lafayette, will continue to review District Ordinance No. 2007-47, and may make future modifications pursuant to Health and Safety Code section 13689.7.

SECTION 2. REPEALS.

All resolutions ratifying and/or adopting previous editions of the California Fire Code are hereby superseded and repealed.

SECTION 3. VALIDITY.

The City Council of the City of Lafayette declares that if any section, paragraph, sentence or word of this resolution or District Ordinance 2007-47 is declared for any reason to be invalid, it is the intent of the City Council of the City of Lafayette that it would have ratified all other portions or provisions of District Ordinance 2007-47 independent of the elimination here from any portion or provision as may be declared invalid.

SECTION 4. EFFECTIVE DATE.

This resolution becomes effective upon its adoption pursuant to Section 13869.7, Health and Safety Code.

The foregoing resolution was introduced at a regular meeting of the City Council of the City of Lafayette on January 28, 2008 and was adopted at a regular meeting of the City Council on April 14, 2008, by the following vote:

AYES:

NOES:

ABSENT:

ABSTAIN:

_____
Mike Anderson, Mayor

ATTEST:

_____
Joanne Robbins, City Clerk

ORDINANCE NO. 2007-47

FIRE CODE

ORDINANCES OF THE COUNTY OF CONTRA COSTA AND OF THE CROCKETT-CARQUINEZ FIRE PROTECTION DISTRICT, CONTRA COSTA COUNTY FIRE PROTECTION DISTRICT, AND EAST CONTRA COSTA FIRE PROTECTION DISTRICT, ADOPTING THE 2007 CALIFORNIA FIRE CODE WITH AMENDMENTS.

The Contra Costa County Board of Supervisors, as the Board of Supervisors for Contra Costa County and as the Board of Directors of the Crockett-Carquinez Fire Protection District, the Contra Costa County Fire Protection District, and the East Contra Costa Fire Protection District, ordains as follows:

SECTION 1. ADOPTION OF THE CALIFORNIA FIRE CODE.

The fire code of Contra Costa County, the Crockett-Carquinez Fire Protection District, the Contra Costa County Fire Protection District, and the East Contra Costa Fire Protection District is the 2007 California Fire Code (California Code of Regulations, Title 24, Part 9 [based on the 2006 International Fire Code published by the International Code Council]), including Appendix Chapter 1, Appendix Chapter 4, Appendix B, Appendix C, Appendix D, Appendix E, Appendix F, and Appendix G, as amended by the changes, additions and deletions set forth in this ordinance. The 2007 California Fire Code, with the changes, additions, and deletions set forth this ordinance, is adopted by this reference as though fully set forth in this ordinance. As of the effective date of this ordinance, the provisions of the fire code are controlling and enforceable within the limits of each jurisdiction.

SECTION 2. AMENDMENTS TO THE CALIFORNIA FIRE CODE.

The 2007 California Fire Code is amended by the changes, additions and deletions set forth in this Section 2. Chapter and Section numbers used below are those of the 2007 California Fire Code.

Chapter 2. Definitions

Section 202 is amended by adding the following definitions to read:

Administrator. Fire Chief.

All-weather surface. A finished surface with asphalt, concrete, or road pavers.

Board of Directors. The Contra Costa County Board of Supervisors as the governing body of the Crockett-Carquinez Fire Protection District, the Contra Costa County Fire Protection District, and the East Contra Costa Fire Protection District.

Board of Fire Commissioners. An advisory commission appointed by the Board of Directors to act as set forth in this ordinance and by resolutions of the Board of Directors.

Central business district. The downtown area of a city, or a business park having a cluster of buildings generally three or more stories in height.

Fire Code Official. In the Contra Costa County Fire Protection District, the Fire Code Official is the Fire Marshal. In the Crockett-Carquinez Fire Protection District and the East Contra Costa Fire Protection District, the Fire Code Official is the Fire Chief.

Firebreak. A continuous strip of land upon and from which all rubbish, weeds, grass or other growth that could be expected to burn has been abated or otherwise removed in order to prevent extension of fire from one area to another.

Firetrail. A graded firebreak of sufficient width, surface, and design to provide access for personnel and equipment to suppress and to assist in preventing a surface extension of fires.

Jurisdiction. The Crockett-Carquinez Fire Protection District, the Contra Costa County Fire Protection District, or the East Contra Costa Fire Protection District, as applicable.

Response time. The elapsed time from receipt of call to the arrival of the first unit on scene.

Rural area. An area generally designated for agricultural or open space uses with parcels more than 10 acres (4.046873ha) in size.

Rural residential area. An area generally designated for single family residential use with parcels between three (1.2140619ha) and 10 (4.046873ha) acres in size.

Running time. The calculated time difference between leaving the first-due station and arriving on the emergency scene.

Suburban area. An area generally designated for single family residential use with residential and non-residential uses generally less than three stories in height, on parcels up to three acres (1.2140619ha) in size.

Temporary fire department access road for construction. An approved temporary roadway for emergency vehicle use during construction of residential subdivision projects.

Temporary fire department access road for construction of one (1) residential (R3) unit. A temporary roadway for emergency vehicle use during construction of an individual residential (R3) structure where a fire department access road is required as part of the project.

Temporary water supply. Water stored for firefighting purposes in an approved aboveground tank during combustible construction.

Tree litter. Any limbs, bark, branches and/or leaves in contact with other vegetation or left to gather on the ground.

Urban area. A commercial or residential area having clusters of buildings generally one to three stories in height, including primarily commercial areas of cities, clusters of apartment buildings or condominiums, and commercial corridors along major arterials.

Chapter 3. General Precautions Against Fire.

Section 304.1.2 is amended to read:

304.1.2 Vegetation. Hazards created by the growth of weeds, grass, vines, trees or other growth capable of being ignited and endangering property shall be mitigated in accordance with Section 316.

Section 311.2.2 is amended by amending exception number 1 and deleting exception number 2, to read:

311.2.2 Fire protection. Fire alarm, sprinkler and standpipe systems shall be maintained in an operable condition at all times.

Exception: When in the opinion of the fire code official the type of construction, fire separation distance and security of the premises do not create a fire hazard, provided the premises have been cleared of all combustible materials and debris, the building has no contents or storage, and the building's windows, doors and other openings are secured to prohibit entry by unauthorized persons.

Section 316 is added to Chapter 3 to read:

316 Exterior Fire Hazard Control.

316.1 General.

316.1.1 Jurisdictional Authority. The Board of Directors, as the supervising, legislative and executive authority of the jurisdiction, hereby delegates to the Board of Fire Commissioners of the jurisdiction all its powers, duties and rights to act pursuant to Part 5 (commencing with Section 14875), Division 12, of the Health and Safety Code, to clear or order the clearing of rubbish, litter or other flammable material where such flammable material endangers the public the safety by creating a fire hazard. Fire hazard abatement will be conducted in accordance with the provisions of said Part 5 and this ordinance. In the application of the provisions of said Part 5 to fire hazard abatement proceedings under this ordinance and the Fire Protection District Law of 1987, the terms "Board of Directors" or "Board," when used in Part 5, means the Board of Fire Commissioners of this jurisdiction under this section; and the officers designated in Health and Safety Code Section 14890 are the employees of the jurisdiction.

316.1.2 If no Board of Fire Commissioners has been appointed for the jurisdiction, then the Board of Directors retains its powers and rights to act pursuant to said Part 5.

316.1.3 Contract for Services. The Board of Directors reserves and retains the power to award a contract for fire hazard abatement work when the employees of the jurisdiction are not used to perform the abatement work.

316.2 Definitions.

Weeds. All weeds growing upon streets or private property in the jurisdiction, including any of the following:

1. Weeds that bear seeds of a fluffy nature or are subject to flight.
2. Sagebrush, chaparral (including Chamise, Coyote Brush/Greasewood, Brooms, and Buckwheat), and any other brush or weeds that attain such large growth as to become, when dry, a fire menace to adjacent improved property.
3. Weeds that are otherwise noxious or dangerous.
4. Poison oak and poison sumac when the conditions of growth constitute a menace to public health.
5. Dry grass, brush, tree litter, litter, or other flammable materials that endanger the public safety by creating a fire hazard.

Rubbish. Waste matter, litter, trash, refuse, debris and dirt on streets, or private property in the jurisdiction which is, or when dry may become, a fire hazard.

Streets. Includes alleys, parkways, driveways, sidewalks, and areas between sidewalks and curbs, highways, public right of ways, private road, trails, easements, and fire trails.

Person. Includes individuals, firms, partnerships, and corporations.

Defensible Space. The area within the perimeter of a parcel providing the key point of defense from an approaching wildland or escaping structure fire.

Priority Hazard Zone. An area where the threat from wildfire is severe due to proximity to open space, topography, degree of space, density of homes amount of vegetation (native and ornamental) and other conditions favorable to fast moving fires.

Reduced Fuel Zone. The area that extends from thirty (30) feet to one hundred (100) feet or more away from the structure or to the property line, whichever is closer to the structure.

Cost of Abatement. Includes all expenses incurred by the jurisdiction in its work of abatement undertaken and administrative costs pursuant to Section 316.5 of this Ordinance.

316.3 Weeds and Rubbish a Public Nuisance. The Board hereby declares that all weeds growing upon private property or streets in this jurisdiction and all rubbish on private property or streets in this jurisdiction are public nuisances. Such weed nuisance is seasonal and recurrent.

316.4 Abatement of Hazard.

316.4.1 Prohibition. No person who has any ownership or possessory interest in or control of parcel of land shall allow to exist thereon any hazardous rubbish, weeds, trees, or other vegetation that constitutes a fire hazard. Destruction by burning within this jurisdiction is unlawful unless the written permission of the fire chief is first obtained, and all other applicable permits are obtained from appropriate governing agencies or jurisdictions.

316.4.2 Specific Requirements. The District shall develop minimum abatement standards for land in residential, business, industrial areas, or land which is unused or vacant. Such standards may be modified periodically as circumstances dictate.

316.4.3 Specific Requirements. The District shall develop minimum abatement standards for land in rural or rural residential areas. Such standards may be modified periodically as circumstances dictate.

316.4.4 General Requirements. The District shall develop minimum abatement standards, which apply regardless of the area in which property is located.

316.5 Abatement Procedures.

316.5.1 Abatement Order. The fire code official may order the abatement of the weeds and rubbish described in Sections 304.1.2 and 316.2. On making the order, the fire code official will mail a copy of a notice to the owners of the affected property as their names and addresses appear upon the last county equalized assessment roll, or as their names and addresses are known to the fire code official. As an alternative to mailing, the notice may be posted upon the affected property and published in the jurisdiction, not less than 15 days prior to the date of the abatement hearing. Copies of the notice will be headed with the words "Notice to Abate Weeds and Rubbish" in letters at least one inch high. The notice will be in substantially the following form:

NOTICE TO ABATE WEEDS AND RUBBISH

You are hereby notified that weeds and rubbish constitute a fire hazard on the following described property owned by you:

(*Describe property by common street designation, by metes and bounds, Assessor's code area and parcel number, or by reference to attached map*).

You must remove the weeds and rubbish within fifteen (15) days from the date of this notice. If you fail to do so, the (jurisdiction) Fire Protection District will remove it, and the cost of the abatement, including administrative costs, will be collected as property taxes and will be a lien on your property until paid.

You are further notified that the Board of Supervisors has declared that such weeds and rubbish constitute a public nuisance and that such weeds also constitute a seasonal and recurring nuisance.

You may appear before the Board of Fire Commissioners of this jurisdiction on (*time and date*) at (*place-room, street, address, and city*) to show cause why this order should not be enforced. (*Signed*): (*Name of fire code official of name of jurisdiction)*

316.5.2 Hearing Date. A date for hearing on the notice will be sent at least 15 days after the date of the notice. The date of the notice is the date on which the notice is placed in the United States mail or the date on which it is posted on the property. At the hearing, the property owner or his agent may appear to show cause why the order should not be enforced.

For good cause shown, the Board of Fire Commissioners may extend the time for compliance with the order or may rescind the order.

316.5.3 Contract Award. If the owner fails to comply with the order, the fire code official may have the weeds and rubbish abated either by employees of this jurisdiction or by contract. If a contract is awarded, it will be by public bid, awarded to the lowest responsible bidder. A contract may include work on more than one parcel. Concerning any contract previously awarded as provided in this subsection and that has been fully extended as provided in that contract, it may thereafter be extended on its same terms and conditions for a further period (not to exceed one year) by agreement of the Board of Supervisors and the involved contractor.

316.5.4 Abatement Report of Costs. The fire code official or his or her designee abating the nuisance will keep an account of the cost of abatement in front of or on each separate parcel of land and will render an itemized report in writing to the Board of Fire Commissioners showing the cost of removing the weeds and rubbish on or in front of each separate lot or parcel of land, or both. Before the report is submitted to the Board of Fire Commissioners, a copy of it will be posted for at least three days on or near the chamber door of the Board with a notice of the time and when the report will be submitted to the Board for confirmation. At the time fixed for receiving and considering the report, the Board of Fire Commissioners will hear it and any objections of any of the property owners liable to be assessed for the work of abatement. Thereupon, the Board of Fire Commissioners may make such modifications in the report as it deems necessary, after which the report will be confirmed. The amount of the cost, including administrative costs, of abating the nuisance in front of or upon the various parcels of the land mentioned in the report as confirmed will constitute special assessment against the respective parcels of land, and are a lien on the property for the amount of the respective assessments. Such lien attaches upon recordation, in the office of the County Recorder, of a certified copy of the Resolution of Confirmation.

316.5.5 Cost Assessments. Upon confirmation of the report of cost by the Board of Fire Commissioners and the recordation of the Resolution of Confirmation, a copy of the report of cost will be sent to the County Auditor, who will enter the amount of the assessments against the parcels. Thereafter the amount of the assessments will be collected at the same time and in the same way as County taxes are collected. The owners are subject to the same penalties and the same procedure and sale in case of delinquency as provided for ordinary county taxes. All laws applicable to the levy, collection, and enforcement of county taxes are applicable to these assessment taxes.

316.6 Alternate Mitigation. In lieu of ordering abatement as provided in Section 316.5.1, the fire code official of this jurisdiction may order the preparation of firebreaks/fuelbreaks around parcels of property where combustible weeds, crops, or brush are present. In determining the proper width for firebreaks/fuelbreaks, the fire code official will consider the height of the growth, weather condition, topography, and the accessibility to the property for fire protection equipment. The procedure set forth in Section 316.5.1 for the abatement of weeds and rubbish shall apply to the preparation of firebreaks/fuelbreaks.

316.7 Subsurface Fires.

316.7.1 Peat Fire. It is the duty of each person, firm, corporation, or association not to permit a peat fire in or a fire involving combustible vegetable matters under the surface of the natural ground to remain upon the property. It is hereby declared that it is the duty of any person as herein defined to take all necessary precautions to extinguish any subsurface fire involving peat or vegetable material at the owner's own cost and expense.

316.7.2 Fire Suppression Costs. If there exists upon the lands or property of any person as herein defined a subsurface fire involving the burning or combustion of peat, vegetable matter or vegetation, and the owner or occupant thereof has not taken reasonable precautions within a reasonable time to extinguish or minimize such fire or combustion, this jurisdiction may, in addition to its regular duties to extinguish or minimize such fire or combustion, go upon the lands of any person as herein defined and extinguish such fire or combustion. Any costs incurred by the Fire District in fighting the fire and for the cost of proving rescue or emergency medical services shall be a charge against the property owner. The charge shall constitute a debt of the property owner and is collectable by the jurisdiction incurring those costs in the same manner as in the case of an obligation under a contract, express or implied. (See Health and Safety Code, §13009.)

Section 317 is added to Chapter 3 to read:

317 Automobile Wrecking Yards.

317.1 Definitions.

Automobile Wrecking Yard. An area that stores or dismantles salvaged vehicles.

Automobile Dismantling. The operation of dismantling or removing parts from salvaged vehicles including engines or engine parts.

317.2 Requirements.

317.2.1 General. The operation of automobile wrecking yards shall be in accordance with this section.

317.2.2 Permits. An operation permit is required for all automobile wrecking yards, automobile dismantling operations, and similar operations.

317.2.3 Fire Apparatus Access Roads. Fire apparatus access roads shall be constructed throughout the site in accordance with this code and shall be maintained clear of all vehicles and stored items.

317.2.4 Welding and cutting. Welding and cutting operations shall be conducted in an approved location, clear of all flammable liquids and combustible materials, including weeds, tires and all other debris.

317.2.5 Housekeeping. Combustible rubbish accumulated on site shall be collected and stored in approved containers, rooms or vaults of noncombustible materials. Combustible vegetation, cut or uncut, shall be removed when determined by the fire code official to be a fire hazard.

317.2.6 Fire Protection. Offices, storage buildings and vehicles used for site operations shall each be provided with at least one portable fire extinguisher with not less than a 4-A: 40-B-C rating. When required by the fire code official, additional fire extinguishers shall be provided.

317.2.7 Tire storage. Tires shall be stored in racks or in a manner as approved by the fire code official.

317.2.7.1 Storage piles shall be located a minimum of 20 feet from property lines and shall have an unobstructed access road on all sides of not less than 20 feet.

317.2.7.2 Tire storage shall be located on-site and no further than 500 feet from a fire hydrant or an approved water supply as determined by the fire code official.

317.2.8 Burning operations. The burning of salvaged vehicles and salvaged or waste materials is prohibited.

317.2.9 Motor vehicle fluids. Motor vehicle fluid shall be drained from salvaged vehicles when such liquids are leaking onto the ground and prior to dismantling or removing engine/motor parts.

317.2.9.1 Fuel tanks. Fuel tanks of salvaged vehicles shall be emptied of all flammable (gasoline, diesel) fuels in an approved manner and stored in approved tanks.

317.2.10 Mitigation of leaking fluids. Precautions shall be taken to prevent fluids from salvaged vehicles from leaking onto the ground. Supplies or equipment capable of mitigating leaks from fuel tanks, crankcases, brake systems and transmissions shall be kept available on site. Single-use plugs, diking and absorbent materials shall be disposed of as hazardous waste and removed from the site in a manner in accordance with federal, state and local requirements.

317.2.11 Lead acid batteries. Lead acid batteries shall be removed from all salvaged vehicles and stored in an approved manner in a location approved by the fire code official.

317.2.12 Repair of vehicle fuel tanks. The repair of fuel tanks, including cutting, welding or drilling of any kind, is prohibited.

Chapter 4. Emergency Planning and Preparedness.

Section 401.3.1 is amended by adding a new subsection 401.3.1.1 to read:

401.3.1.1 False alarm fee. A fee may be charged for false alarms in accordance with a fee schedule adopted by the Board of Directors.

Chapter 5. Fire Service Features.

Section 502.1 is amended by adding the following definition, to read:

ALL-WEATHER DRIVING SURFACE. A roadway, including all underground utilities, curbs, gutters, and a minimum surface finish of one layer of asphalt or concrete, that is designed to carry the imposed weight loads of fire apparatus.

Section 503.1.1 is amended to modify exception 2 and add an exception 4, to read:

2. At the discretion of the fire code official after reviewing specific fire apparatus access deficiencies in a Group R-3 occupancy the installation of an automatic sprinkler system may be used as an approved alternative means of protection.
4. The decision to modify and the extent of any such modification shall be in accordance with minimum standards established by the fire code official.

Section 503.1.2 is amended to add subsections 503.1.2.1 and 503.1.2.2, to read:

503.1.2.1 Required additional access roads for residential developments. The minimum number of access roads serving residential development(s) shall be based upon the number of dwelling units served, as follows:

- 1-25 units: one public or private access road.
- 26-99 units: one public or private access road and one emergency access road.
- 100 or more units: a minimum of two public or private access roads.

503.1.2.2 Access to Open Spaces. When existing access to open land or space, or to fire trail systems maintained for public or private use, is obstructed by new development of any kind, the developer shall provide an alternate means of access into the area that is sufficient to allow access for fire personnel and apparatus. The alternate means of access must be approved by the fire code official.

Section 503.2.1 is amended to add subsections 503.2.1.1 and 503.2.1.2, to read:

503.2.1.1 Fire equipment outsets or turnouts. Any fire apparatus access road or driveway that is designed to be less than 20 feet wide and to exceed 750 feet in length shall have outsets or turnouts every 300 feet along the length of the road or driveway, or at locations approved by the fire code official. Each outset or turnout shall be of the following dimensions: a 28 foot wide road that extends at least 40 feet in length.

503.2.1.2 Parking of vehicles on fire apparatus access roads. The following parking restrictions apply to fire apparatus access roads:

1. No parking permitted on a road less than 28 feet wide.
2. Parking is permitted on one side only on a road 28 feet wide to 36 feet wide. Parking is permitted only on the side of the road that does not have fire hydrants.
3. Parking is permitted on a road 36 feet wide or more.

Section 503.2.7 is deleted in its entirety and replaced by the following, to read:

503.2.7 Grade. A fire department access road having a grade of between 15 percent and 20 percent shall be designed to have a finished surface of grooved concrete sufficient to hold a 44,000 pound (19 958 kg) traction load. Grooved concrete shall be ¼ inch (6 mm) wide by ¼ inch (6 mm) deep and ¾ inch (19 mm) on center with a 2 percent side slope and grooves set at a 30 degree angle to a 45 degree angle. No grade shall exceed 20 percent unless authorized in writing by the fire code official.

Section 503.2 is amended to add subsections 503.2.8, 503.2.9, and 503.2.10, to read:

503.2.8 Minimum turning radius. A fire apparatus access road shall have a minimum standard turning radius of 25 feet (7620 mm) inside and 45 feet (13 716 mm) outside.

503.2.9 Angles of approach and departure. The angles of approach and departure for any means of access shall not exceed 10 percent at 10 feet of the grade break.

503.2.10 Roadway minimum design weight load capacity. A fire apparatus access road shall be designed and maintained to support a minimum load of 74,000 pounds (33 566 kg) in accordance with CalTrans Design Standard HS-20-44, and shall include an all-weather driving surface.

Exception: Roadways serving one or two single family homes may be constructed of an alternate surface material, providing the imposed weight load design minimums are met and the grade does not exceed 10 percent.

Section 505 is amended by adding Section 505.3, to read:

505.3 Street names and addressing. Street names and addressing shall be submitted for review and approval to the fire code official, whose approval will not be unreasonably withheld. The purpose of the review is to verify that new street names and addressing will not duplicate existing street names and addressing.

Section 508.1 is amended by adding subsection 508.1.1, to read:

508.1.1 Suburban and Rural Water Supply. In areas where public or private fire mains are not available for the provision of the required fire flow, or the parcel is not within a water district, the following minimum quantities of water dedicated to fighting fires shall be provided:

1. For single family dwellings less than 5,000 square feet (465 m^2), a minimum 5,000 gallon (18 928 L) tank for fire protection shall be provided.

2. For single family dwellings greater than 5,000 square feet (465 m^2), a minimum 8,000 gallon (30 283 L) tank for fire protection shall be provided.

3. For single family dwellings greater than 10,000 square feet (929 m^2), a minimum 10,000 gallon (37 854 L) tank for fire protection shall be provided.

Section 508.2 is amended by adding subsection 508.2.3, to read:

508.2.3 Suburban and rural water supply storage. Swimming pools, ponds, and underground cisterns that would require a drafting operation shall not be considered water storage for the purposes of Section 508.1.1.

Chapter 6. Building Services and Systems.

Section 603.6 is amended by adding subsection 603.6.6, to read:

603.6.6 Sparks from chimneys. A chimney that is used with either a fireplace or a heating appliances in which solid or liquid fuel is used shall be maintained with a spark arrester that is required for incinerators pursuant to the California Mechanical Code.

Section 608 is amended by adding subsection 608.1.1, to read:

608.1.1 Permits. A permit is required to operate a stationary lead acid battery system for standby power systems having a electrolyte capacity of more than 50 gallons (189 L) or more than 1,000 pounds ((454 kg) of lithium-ion. (See Appendix Chapter 1, Section 105.6.49.)

Chapter 8. Interior Finish, Decorative Materials and Furnishings.

Section 806 is amended by adding subsections 806.1.4, 806.1.5 and 806.1.6, to read:

806.1.4 Flame retardance. Cut trees shall be treated by a California State Fire Marshal licensed fire retardant applicator. Trees shall be properly treated with an approved flame retardant.

806.1.5 Tags. Trees shall bear a tag stating date of placement in the public building, type of flame-retardant treatment used, name of the person who applied the flame retardant, the name of the person affixing the tag, a permit expiration date and the name of the designated individual making daily tests.

806.1.6 Daily tests. Trees shall be tested daily by a designated individual. The test shall include a check for dryness and adequate watering.

Chapter 9. Fire Protection Systems.

Section 903.1.1, Alternative protection, is deleted in its entirety.

Section 903.2 is amended to read:

903.2 Where required. Approved automatic sprinkler systems shall be installed in new buildings and structures pursuant to section 903.2. For the occupancies set forth in Sections 903.2.1 through 903.2.10, unless otherwise specified, the automatic sprinkler system

requirement applies to any new building or structure having a total floor area that exceeds the applicable maximum floor area listed in Table 903.2. The floor area measurements specified in Table 903.2 includes all floor area of a building except for area separation walls, public ways and yards.

Sections 903.2.1 through 903.2.10 are amended to read:

903.2.1 Group A. An automatic sprinkler system shall be provided throughout buildings containing a Group A occupancy as provided in this section.

903.2.1.1 Group A-1. An automatic sprinkler system shall be provided for Group A-1 occupancies where the fire area exceeds the square footage specified in Table 903.2.

903.2.1.2 Group A-2. An automatic sprinkler system shall be provided for Group A-2 occupancies where the fire area exceeds the square footage specified in Table 903.2.

903.2.1.3 Group A-3. An automatic sprinkler system shall be provided for Group A-3 occupancies where the fire area exceeds the square footage specified in Table 903.2.

903.2.1.4 Group A-4. An automatic sprinkler system shall be provided for Group A-4 occupancies where the fire area exceeds the square footage specified in Table 903.2.

903.2.1.5 Group A-5. The requirements of California Fire Code section 903.2.1.5 apply.

903.2.1.6 Group B. An automatic sprinkler system shall be provided throughout all buildings containing a Group B occupancy where the fire area exceeds the square footage specified in Table 903.2.

903.2.2 Group E. An automatic sprinkler system shall be provided for Group E occupancies fire area exceeds the square footage specified in Table 903.2.

903.2.3 Group F-1. An automatic sprinkler system shall be provided throughout all buildings containing a Group F-1 occupancy where the fire area exceeds the square footage specified in Table 903.2;

903.2.3.1 Woodworking operations. The requirements of California Fire Code section 903.2.3.1 apply.

903.2.3.2 Group F-2. An automatic sprinkler system shall be provided throughout all buildings containing a Group F-2 occupancy where the fire area exceeds the square footage specified in Table 903.2.

903.2.4 Group H. The requirements of California Fire Code section 903.2.4 apply.

903.2.5 Group I. The requirements of California Fire Code section 903.2.5 apply.

903.2.6 Group M. An automatic sprinkler system shall be provided throughout buildings containing a Group M occupancy where the fire area exceeds the square footage specified in Table 903.2.

903.2.6.1 High-piled storage. The requirements of California Fire Code section 903.2.6.1 apply.

903.2.7 Group R. The requirements of California Fire Code section 903.2.7 apply.

903.2.8 Group S-1. An automatic sprinkler system shall be provided throughout all buildings containing a Group S-1 occupancy where the fire area exceeds the square footage specified in Table 903.2.

903.2.8.1 Repair garages. An automatic sprinkler system shall be provided throughout all buildings containing a repair garage where the fire area exceeds the square footage specified in Table 903.2 for a Group S-1 occupancy.

903.2.8.2 Bulk storage of tires. An automatic sprinkler system shall be provided throughout all buildings used for the storage of tires where the fire area exceeds the square footage specified in Table 903.2 for a Group S-1 occupancy.

903.2.9 Group S-2. An automatic sprinkler system shall be provided throughout all buildings containing a Group S-2 occupancy where the fire area exceeds the square footage specified in Table 903.2.

903.2.9.1 Group U. An automatic sprinkler system shall be provided throughout all buildings containing a Group U occupancy where the fire area exceeds the square footage specified in Table 903.2.

903.2.10 Windowless stories in all occupancies. The requirements of California Fire Code section 903.2.10 apply, except section 903.2.10.3 is amended to read:

903.2.10.3 Buildings three stories or more, or more than 35 feet in height. An automatic sprinkler system shall be installed in all occupancies regardless of type of construction, floor area, or occupancy load if the building is three or more stories or more than 35 feet (10 668 mm) in height measured in accordance with California Building Code Chapter 5.

Exception: One-family or two-family dwellings, provided they do not exceed the square footage set forth in Table 903.2.

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Table 903.2 is added to read:

Table 903.2

Automatic Sprinkler Requirements

Maximum Allowable Floor Area, in Square Feet for Non-Sprinklered Buildings

(Types are Construction Types as specified in California Building Code Chapter 6)

("All" means all buildings of that type and occupancy must be sprinklered, regardless of floor area)

OCCUPANCY	Type I	Type II	Type III	Type IV	Type V
A-1	5,000	5,000	5,000	5,000	3,000
A-2	5,000	5,000	5,000	5,000	3,000
A-3	5,000	5,000	5,000	5,000	3,000
A-4	5,000	5,000	5,000	5,000	3,000
A-5	1,000	1,000	1,000	1,000	1,000
B	5,000	5,000	5,000	5,000	3,000
E-(Public)	As required by California Building Code				
E-(Private)	5,000	5,000	5,000	3,000	3,000
E-day care	5,000	5,000	5,000	3,000	3,000
F-1	5,000	5,000	5,000	5,000	3,000
F-2	5,000	5,000	5,000	5,000	3,000
H Div. 1	All	All	All	All	All
H Div. 2	All	All	All	All	All
H Div. 3	All	All	All	All	All
H Div. 4	All	All	All	All	All
H Div. 5	All	All	All	All	All
I-1	All	All	All	All	All
I-2	All	All	All	All	All
I-3	All	All	All	All	All
I-4	All	All	All	All	All
L	All	All	All	All	All
M	5,000	5,000	5,000	5,000	3,000
R-1	All	All	All	All	All
R-2	All	All	All	All	All
R-3	All	All	All	All	All
R-4	All	All	All	All	All
S-1	5,000	5,000	5,000	5,000	3,000
S-2	5,000	5,000	5,000	5,000	3,000
U	5,000	5,000	5,000	5,000	3,000

Section 903.3.5 is amended to add subsection 903.3.5.3 to read:

903.3.5.3 Non-permissible water supply storage. Swimming pools, ponds, and underground cisterns shall not be considered water storage for the purposes of Section 903.3.5.

Exception: Secondary water supplies for fire pumps in commercial buildings where the primary water supply is provided by a municipal water purveyor.

Section 903.6 is amended by adding subsections 903.6.2, 903.6.3 and 903.6.4, to read:

903.6.2 Additions, alterations, or remodels. In an existing building, if any addition, alteration, or remodel causes the total square footage to exceed the allowable floor area specified in Table 903.2 by more than 10 percent, the entire building shall be protected by an automatic sprinkler system.

903.6.3 Change of occupancy classification. Any existing buildings that undergoes a change of occupancy classification shall comply with the requirements of Section 903.2 and Table 903.2.

Section 907.15 is amended by adding subsections 907.15.1 and 907.15.2 to read:

907.15.1 Listing of fire alarm systems. All fire alarm systems shall be UL-listed Central Station service systems as defined by the 2002 National Fire Alarm Code. When approved by the fire code official, local alarms are permitted in:

1. Residential Day Care Facilities (occupancy load of 14 or less)
2. Single Family Dwellings.
3. Residential Care Facilities Licensed by Community Care Licensing with an occupant load of 6 or less.
4. Occupancies with a local fire alarm system that will give an audible and visible signal at a constantly attended location. A "constantly attended location" means a location on site that is staffed 24 hours a day by at least one alert adult who remains awake and who does not have conflicting duties that may delay detection and reporting of an alarm.
5. Other occupancies where the installation of a monitored system may be impractical or inappropriate.

907.15.2 Certification. Fire alarm systems shall be UL-Certified. A Certificate of Completion and other documentation listed in Section 1-6 of the 2002 National Fire Alarm Code shall be provided for all new fire alarm system installations.

Section 914.12 is added to read:

914.12 Computer rooms. To prevent false smoke alarms from cement dust, in a computer room or computer building with an underfloor space, cement subfloors shall be sealed.

Chapter 10. Means of Egress.

Section 1024.6 is amended by adding a new subsection 1024.6.1 to read:

1024.6.1 Exit discharge surface. Exterior exit pathway surfaces shall be suitable for pedestrian use in inclement weather, and shall terminate at a public way as defined in the California Building Code.

Chapter 14. Fire Safety During Construction and Demolition.

Section 1401.3 is added to read:

1401.3 Permits.

1401.3.1 Asbestos-removal operations. A permit is required to conduct asbestos-removal operations regulated by Section 1418. (See Appendix Chapter 1, Section 105.6.48.)

1401.3.2 Temporary fire department access road for construction. A permit is required to use a temporary fire department access road for construction regulated by Sections 1410.2 and 1410.2.1. (See Appendix Chapter 1, Section 105.6.54.)

1401.3.4 Temporary water supply. A permit is required to use a temporary water supply for construction of residential projects or subdivisions regulated by Section 1412.2. (See Appendix Chapter 1, Section 105.6.55.)

Section 1402.2 is amended to read:

1404.2 Waste disposal. Combustible debris shall not be accumulated within buildings. Combustible debris, rubbish and waste material shall be removed from buildings at the end of each shift of work. Combustible debris, rubbish and waste material shall not be disposed of by burning on the site unless approved in writing by the fire code official. Once removed from a structure, combustible debris shall not be deposited within 20 feet (6096mm) of the structure.

Section 1410 is amended in its entirety to read:

1410 Access for firefighting.

1410.1 Required access. Approved emergency vehicle access for fire apparatus and other emergency vehicles shall be provided to all construction or demolition sites in accordance with this section.

1410.2 Temporary fire apparatus access and access roads for construction. Permanent roads must be used for emergency vehicle access. Temporary access roads may be used in lieu of permanent roads, but only from April 15 through October 15 of each year. These time restrictions may be modified in writing by the fire code official depending on inclement weather conditions. A temporary fire department access road shall be established and maintained as follows:

1. Prior to the start of combustible construction, the applicant shall call for inspection to verify the temporary access road has been installed, meets fire district standards, and is in service.

2. A temporary access road shall include a sub-base and shall be compacted to withstand a minimum imposed weight load for fire apparatus of 74,000 lbs.
3. Turn-a-rounds shall be provided on access roads that exceed 150 feet (45.72m) in length. Turn-a-rounds should primarily be those turn-a-rounds that are designed as part of the project. Alternative turn-a-round provisions may be used only with the written approval of the fire code official. Turning radius shall be 28 feet (6096 mm) inside minimum diameter.
4. The parking of work vehicles must be monitored to assure that a minimum unobstructed roadway width of 20 feet (6.096m) is maintained at all times for emergency vehicle access.
5. Temporary road grades shall not exceed 10 percent.
6. The road surface shall be installed up to the final lift before combustible construction begins and on or before the October 15 date.
7. If at any time a condition of a temporary access road permit is violated, a "Stop Work Order" will be issued at which time all combustible construction will be halted until the conditions of the permit are re-established. If several conditions are violated or repeated violations occur, a permanent "Stop Work Order" may be issued and will remain in effect until permanent roadways are installed.
8. Timelines may be modified in writing by the fire code official depending on inclement weather conditions.

1410.2.1 Temporary fire department access road for construction of one (1) residential (R3) unit. A temporary fire department access road for construction of one (1) residential (R3) unit shall be established and maintained as follows:

1. Prior to the start of combustible construction the applicant shall call for inspection to verify the temporary access road has been installed, meets fire district standards, and is in service.
2. A temporary access road shall include a sub-base and shall be compacted to withstand a minimum imposed weight load for fire apparatus of 74,000 lbs.
2. A road that exceeds 150 feet (45.72m) in length shall provide a turn-a-round that meets fire district standards.
3. A minimum unobstructed road width of 16 feet (4.877m) shall be maintained at all times.
4. Temporary road grades shall not exceed 10 percent.
5. The road surface shall be installed up to the final lift before combustible construction begins and on or before the October 15 date.
6. If at any time a condition of a temporary access road permit is violated, a "Stop Work Order" will be issued at which time all combustible construction will be halted until the conditions of the permit are re-established. If several conditions are violated or repeated violations occur, a permanent "Stop Work Order" may be issued and will remain in effect until permanent roadways are installed.

1410.3 Obstructions to access roads. Staging of building materials, placement of equipment, and parking of worker vehicles shall not occur within the required width of a fire apparatus access road.

1410.3.1 Access to structures. Staging of building materials, placement of equipment or parking of worker vehicles shall not obstruct frontal access to structures under construction or fire hydrants.

1410.3.2 Construction site locks. Site security gates shall be provided with a non-case-hardened padlock.

Section 1412 is amended in its entirety to read:

1412 Water supply for fire protection.

1412.1 When required. An approved water supply for fire protection, either temporary or permanent, shall be made available as soon as combustible material arrives on the site.

1412.2 Temporary water supply for subdivisions. For the construction of residential projects or subdivisions, a temporary water supply is allowed only for the construction of model units. Temporary water supplies shall meet the following requirements:

1. Prior to the start of combustible construction, the applicant shall call for inspection to verify that a temporary water supply has been provided, meets fire district standards, and is in service.
2. Temporary water storage for firefighting shall be provided in 20,000-gallon (75 798L) above-ground containers. The minimum tank size for temporary water storage is 20,000gallons (75 798L).
3. Temporary water storage containers shall be placed at locations determined by the fire code official to allow adequate fire apparatus and other emergency vehicle access. Containers shall be located at least 50 feet (15.24m) from all structures.
4. Each temporary water storage container shall have a 4½ inch male (114.3mm) NST valve-controlled outlet. The outlet shall be located to provide ready fire apparatus access.
5. Each temporary water storage container shall be kept full at all times. Water storage containers shall be restricted to fire department use only.
6. Access to temporary water containers shall not be obstructed at any time. Obstructions include, but are not limited to, obstructions by worker vehicles and the staging of building materials.

1412.3 Temporary water supply for a single residential unit. For the construction of one (1) residential (R3) unit, a temporary water supply may be authorized by the fire code official when a fire hydrant is required as part of the project and a signed contract between the applicant and the public water provider exists. Temporary water supplies shall meet the following requirements:

1. The signed contract between the applicant and the public water provider, denoting the installation timeline, is submitted with the permit application.

2. Prior to the start of combustible construction, the applicant shall call for inspection to verify that a temporary water supply has been provided, meets fire district standards, and is in service.
3. Temporary water storage for firefighting shall be provided in the quantity deemed necessary by the fire code official. Temporary water storage shall be in an above-ground container.
4. The temporary water storage container shall be placed at a location determined by the fire code official to allow adequate fire apparatus and other emergency vehicle access. The container shall be at least 50 feet (15.24m) from all structures.
5. The temporary water storage container shall have a 4½ inch male (114.3mm) NST valve-controlled outlet. The outlet shall be located to provide ready fire apparatus access.
6. The temporary water storage container shall be kept full at all times. The water storage container shall be restricted to fire department use only.
7. Access to the temporary water container shall not be obstructed at any time. Obstructions include, but are not limited to, obstructions by worker vehicles and the staging of building materials.

Section 1418 is added to read:

Section 1418 Asbestos removal.

1418.1 General. Operations involving removal of asbestos or asbestos-containing materials from buildings shall be in accordance with Section 1418.

Exception: Section 1418 does not apply to the removal of asbestos from:
1. Pumps, valves, gaskets and similar equipment.
2. Pipes, ducts, girders or beams that have a length less than 21 linear feet (6400 mm).
3. Wall or ceiling panels that have an area of less than 10 square feet (0.93 m2) or a dimension of less than 10 linear feet (3048 mm).
4. Floor tiles when their removal can be completed in less than four hours.
5. Group R occupancies.

1418.2 Permits. A permit is required to conduct asbestos removal operations. (See Appendix Chapter 1, Section 105.6.48.)

1418.3 Notification. The fire code official shall be notified 24 hours prior to the commencement and closure of asbestos-removal operations. The permit applicant shall notify the building official when asbestos abatement involves the removal of materials that were used as a feature of the building's fire resistance.

1418.4 Plastic Film. Plastic film that is installed on building elements shall be flame resistant as required for combustible decorative material, in accordance with Section 807.

1418.5 Signs. Approved signs shall be posted at the entrance, exit and exit-access door, decontamination areas and waste disposal areas for asbestos-removal operations. The signs shall state that asbestos is being removed from the area, that asbestos is a suspected carcinogen, and that proper respiratory protection is required. Signs shall have a reflective surface. Lettering shall be a minimum of 2 inches (51 mm) high.

Section 1419 is added to Chapter 14 to read:

Section 1419 Demolition of structures -- Construction documents. Construction documents and a schedule for demolition must be submitted to the fire code official when required by the building code official. Where construction documents and a schedule are required to be submitted, no work shall be done until the construction documents or schedule, or both, are approved by the fire code official.

Chapter 27. Hazardous Materials – General Provisions.

Section 2701.1 is amended by adding subsections 2701.1.2 and 2701.1.3 to read:

2701.1.2 Coordinated enforcement. Where the Contra Costa County Health Services Department is enforcing Health and Safety Code provisions or county regulations pertaining to hazardous materials, the District will coordinate regulation efforts to the extent practicable so as to not require duplication of time and resources to comply with hazardous material regulations. If Health and Safety Code provisions and California Fire Code regulations conflict, the more restrictive provisions shall prevail.

Exception: Where state regulations specifically limit or preempt local regulations from being more restrictive.

2701.1.3 Established limits. The storage of hazardous materials and maximum quantity onsite is prohibited in all zoning districts except districts zoned for commercial, industrial or agricultural uses.

Section 2701.5.1 is amended by adding subsection 2701.5.1.1 to read:

2701.5.1.1 Alternate hazardous material management plan. Hazardous material management plans required by the Contra Costa County Health Services Department will be accepted in lieu of plans required by Section 2701.5.1.

Section 2701.5.2 is amended by adding subsection 2701.5.2.1 to read:

2701.5.2.1 Alternate hazardous material inventory statement. Hazardous material inventory statements required by the Contra Costa County Health Services Department will be accepted in lieu of statements required by Section 2701.5.2.

Section 2701.5 is amended by adding subsection 2701.5.3 to read:

2701.5.3 Emergency response support information. When required by the fire code official, additional information may be required to facilitate emergency responses to facilities, buildings, areas, and rooms that contain hazardous materials. Floor plans, material safety data sheets, and other information may be required to be stored in cabinets located outside of facilities or buildings. Information may be required to be maintained in a specific electronic media format to facilitate computer aided dispatching.

Section 2703.9.1 is amended by adding subsection 2703.9.1.2 to read:

2703.9.1.2 Documentation. Compliance with this section's requirements for personnel training and written procedures may be established by evidence of compliance with state and

federal hazardous material regulations. Evidence of compliance with state and federal hazardous material regulations shall be maintained and available for inspection by fire department personnel.

Chapter 30. Compressed Gases.

Section 3001.1 is amended to add subsection 3001.1.1 to read:

3001.1.1 Established limits and maximum capacity. The storage of CNG is prohibited in all zoning districts except districts zoned for commercial, industrial, or agricultural uses. The aggregate capacity of any one CNG installation shall not exceed 183,000 cubic feet (5 181 974 L).

Chapter 32. Cryogenic Fluids.

Section 3201.1 is amended to add subsection 3201.1.1 to read:

3201.1.1 Established limits. The storage of flammable cryogenic fluids is prohibited in all zoning districts except districts zoned for industrial uses.

Section 3204.3.1.1 is amended to read:

3204.3.1.1 Location. Stationary containers shall be located in accordance with Section 3203.6. Containers of cryogenic fluids shall not be located within diked areas containing other hazardous materials.

The storage of flammable cryogenic fluids in stationary containers outside of buildings is prohibited in any central business district and in all zoning districts except districts zoned for commercial, industrial, rural, or agricultural uses.

Chapter 33 Explosives and Fireworks.

Section 3301 is amended to add Sections 3301.2, 3301.3, 3301.4 and 3301.5, to read:

3301.2 Fireworks. The possession, manufacture, storage, sale, handling and use of fireworks are prohibited. The possession, manufacture, storage, sale, handling and use of fireworks or pyrotechnic materials within the jurisdiction of the District are prohibited.

Exceptions:

1. Fireworks may be temporarily stored only if they are aerial or theatrical piece fireworks stored in conjunction with an approved and permitted aerial or set display.
2. Snap Caps and Party Poppers classified by the State Fire Marshal as pyrotechnic devices.

3301.2.1 Prohibited and Limited Acts. The storage of explosive materials is prohibited in any central business district and in all zoning districts except districts zoned for industrial or agricultural uses. In districts where the storage of explosive materials is permitted, the quantities of explosives and distances shall be in accordance with International Fire Code Sections 3301.8.1 and 3301.8.1.1.

3301.3 Rocketry. The storage, handling and use of model and high-power rockets shall comply with the requirements of the California Code of Regulations, Title 19, Chapter 6, Article 17 and, when applicable, NFPA 1122, NFPA 1125, and NFPA 1127.

3301.3.1 Ammonium nitrate. The storage and handling of ammonium nitrate shall comply with the requirements of Chapter 40 and NFPA 490.

Exception: The storage of ammonium nitrate in magazines with blasting agents shall comply with the requirements of NFPA 495.

3301.4 Residential uses. No person shall keep or store, nor shall any permit be issued to keep or store, any explosives, fireworks or pyrotechnic material at any place of habitation, or within 100 feet (30 480mm) thereof.

Exception: Storage of smokeless propellant, black powder, and small arms primers for personal use and not for resale in accordance with Section 3306.

3301.5 Sale and retail display. The possession, manufacture, storage, sale, handling and use of fireworks or pyrotechnic materials is prohibited.

Exception: Snap Caps and Party Poppers classified by the State Fire Marshal as pyrotechnic devices.

Section 3308 is amended by adding Sections 3308.2, 3308.2.1, and 3308.3 to read:

3308.2 Permit required. A permit is required to conduct an aerial display in accordance with California Code of Regulations, Title 19, Chapter 6. (See Appendix Chapter 1, Section 105.6.51.)

Exception: Snap Caps and Party Poppers classified by the State Fire Marshal as pyrotechnic devices.

3308.3 Financial responsibility. Before a permit is issued pursuant to Section 3308.2, the applicant shall file with the jurisdiction a corporate surety bond in the principal sum of $1,000,000 or a public liability insurance policy for the same amount, for the purpose of the payment of all damages to persons or property which arise from, or are caused by, the conduct of any act authorized by the permit upon which any judicial judgment results. The fire code official is authorized to specify a greater or lesser amount when, in his or her opinion, conditions at the location of use indicate a greater or lesser amount is required. Government entities shall be exempt from this bond requirement.

Chapter 34. Flammable and Combustible Liquids.

Section 3404.2.9.5.1 is amended to read:

3404.2.9.5.1 Locations where above-ground tanks are prohibited. The storage of Class I and II liquids in above-ground tanks outside of buildings is prohibited in all zoning districts except districts zoned for commercial, industrial, or agricultural uses.

Exception: Protected above-ground tanks for the purpose of emergency power generator installations in areas zoned commercial, industrial, agricultural, central business district,

rural or rural residential, and for facilities on an individual basis consistent with the intent of this provision. Tank size shall not exceed 500 gallons (1892.706L) for Class I or II liquids, or 1,000 gallons (3785.412L) for Class III liquids.

Section 3404.2.11 is amended to read:

3404.2.11 Underground tanks. Underground storage of flammable and combustible liquids in tanks shall comply with Section 3404.2 and Sections 3404.2.11.1 through 3404.2.11.5.3.

Section 3404.2.11 is amended to add subsection 3404.2.11.5.3, to read:

3404.2.11.5.3 Secondary containment. Underground tanks used for the storage of flammable and combustible liquids shall be provided with secondary containment. In lieu of providing secondary containment for an underground tank, an above-ground tank in an underground vault complying with Section 3404.2.8 may be permitted.

Section 3404.2.13.1.3 is amended to read:

3404.2.13.1.3 Out of service for one year. Underground tanks that have been out of service for a period of one year shall be removed from the ground in accordance with Section 3404.2.14.

Section 3404.2.13.1.3 is amended to add subsection 3404.2.13.1.3.1 to read:

3404.2.13.1.3.1 Abandoned properties. Tanks taken out of service as a result of properties being abandoned or their use being changed shall be removed in accordance with Section 3404.2.14.

Section 3404.2.13.1.4 is deleted in its entirety.

Section 3406.4 is amended by adding subsection 3406.4.5.1, to read:

3406.4.5.1 Established limits. Bulk plants or terminals for receiving or storage of flammable or combustible liquids are prohibited in any central business district, any urban area, and any suburban area.

Section 3406.5 is amended by adding subsection 3406.5.1.1.1, to read:

3406.5.1.1.1 Established limits. Bulk transfer and process transfer operations for receiving or transferring flammable or combustible liquids are prohibited in any central business district, any urban area, and any suburban area.

Chapter 38. Liquefied Petroleum Gases.

Section 3803.2.1.7 is amended in its entirety to read:

3803.2.1.7 Use for food preparation. Individual portable L-P containers used, stored, or handled inside a building classified as a Group A or Group B occupancy for the purposes of cooking, food display, or a similar use, shall be limited in size to one quart capacity and shall be of an approved type. The number of portable containers permitted will be at the discretion of the fire code official. LP-gas appliances used for food preparation shall be listed for such

use in accordance with the International Fuel Gas Code, the International Mechanical Code, and NFPA 58.

Section 3804.2 is amended to read:

3804.2 Maximum capacity within established limits. The storage of liquefied petroleum gas is prohibited in any central business district and in all zoning districts except districts zoned for commercial, industrial, rural or agricultural uses. The aggregate capacity of any one installation used for the storage of liquefied petroleum gas shall not exceed a water capacity of 2,000 gallons (7570 L).

Chapter 45. Referenced Standards.

NFPA 13, 2002 Edition, Section 8.1 Basic Requirements. Section 8.1 is amended to add subsection 8.1.3, to read:

8.1.3 System risers shall be located in common areas of the protected premises with regards to firefighter access. System risers located inside buildings shall either be located in stairways or in riser closets accessible from common areas.

NFPA 13, 2002 Edition, Section 11.2.3.1.8 Restrictions. Section 11.2.3.1.8 is amended to add item (13) and (14), to read:

(13) In buildings of undeclared use with floor to structure height greater than 14 feet (356 mm), the fire sprinkler system shall be designed with a minimum design density of 0.33 gpm (1.25L) per square feet with a minimum design area of 3,000 square feet (278.709m^2). Where a subsequent occupancy requires a system with greater capability, it shall be the responsibility of the owner and/or the occupant to upgrade the system.

(14) In buildings of undeclared use with floor to structure height less than 14 feet (356 mm), the fire sprinkler system shall be designed with a minimum design density of 0.20 gpm (.076L) per square feet with a minimum design area of 3,000 square feet (278.709m^2). Where a subsequent occupancy requires a system with greater capability, it shall be the responsibility of the owner and/or the occupant to upgrade the system.

NFPA 13R, 2002 Edition, Section 6.6.4 Fire Department Connection. Section 6.6.4.2 is amended to read:

6.6.4.2 Fire department connections shall be a minimum 2½ inch (64mm).

NFPA 72, 2002 Edition, Section 4.4.4.2.1 Installation and Design. Section 4.4.4.2.1 is amended to add subsections 4.4.4.2.1.1 and 4.4.4.2.2, to read:

4.4.4.2.1.1 Fire Alarm Control Unit Locations. Fire alarm control units shall be installed in common areas of the protected premises to provide adequate firefighter access in proximity to the main building entrance. The location of fire alarm control units will be determined by the fire code official.

4.4.4.2.1.2 Remote Fire Alarm Annunciation Panel Locations. Fire alarm annunciation panels shall be installed in common areas of the protected premises to provide adequate

firefighter access in proximity to the main building entrance. The location of fire alarm annunciation panels will be determined by the fire code official.

NFPA 72, 2002 Edition, Section 6.15.5.3 HVAC Systems. Section 6.15.5.3 is amended by amending the second sentence, to read:

6.15.5.3 Connections between fire alarm systems and the HVAC system for the purpose of monitoring and control shall operate and be monitored in accordance with applicable NFPA standards. Smoke detectors mounted in the air ducts of HVAC systems in buildings protected throughout by an automatic sprinkler system complying with NFPA 13 shall initiate a supervisory signal at the protected premises and at a UL-listed Central Station Service.

Appendix Chapter 1. Administration.

Section 101.1 is amended as follows:

101.1 Title. The fire code of Contra Costa County, the Crockett-Carquinez Fire Protection District, the Contra Costa County Fire Protection District, and the East Contra Costa Fire Protection District, hereinafter referred to as "this code," is the 2007 California Fire Code (California Code of Regulations, Title 24, Part 9 [based on the 2006 International Fire Code published by the International Code Council]), including Appendix Chapter 1, Appendix Chapter 4, Appendix B, Appendix C, Appendix D, Appendix E, Appendix F, and Appendix G, as amended by the changes, additions and deletions set forth in this ordinance.

Section 102.1 is amended to read:

102.1 Construction and design provisions. The construction and design provisions of this code shall apply to:

1. Structures, facilities and conditions arising after the adoption of this code.
2. Existing structures, facilities and conditions not legally in existence at the time of adoption of this code.
3. Existing structures, facilities and conditions when identified in specific sections of this code.
4. Existing structures, facilities and conditions which, in the opinion of the fire code official, constitute a distinct hazard to life or property.
5. Where not otherwise limited by law, the provisions of this Code shall apply to vehicles, ships, boats, and mobile vehicles when fixed in a specific location within the boundaries of this jurisdiction.

Section 103 is amended in its entirety to read:

Section 103. ESTABLISHMENT AND DUTIES OF THE FIRE PREVENTION DIVISION.

This code shall be enforced by the jurisdiction's Fire Prevention Division, which is hereby established and which shall be operated under the supervision of the Fire Marshal. The Fire Marshal in charge of the Fire Prevention Division shall be appointed by the Fire Chief. The Fire Marshal shall recommend to the Fire Chief the employment of technical staff members, who will be selected in accordance with the procedures of the jurisdiction.

Section 104 is amended to add subsection 104.1.1 to read:

104.1.1 Fire prevention personnel and police. The fire code official and his or her designated representative(s) shall have the powers of peace officers while engaged in the performance of their duties with respect to the prevention, investigation, and suppression of fires and the protection and preservation of life and property against the hazards of fire and conflagration. This section is a declaration of Health and Safety Code section 13873.

Section 104.5 is amended to add subsection 104.5.1 to read:

104.5.1 Issuance of citations. The fire code official, or his or her duly authorized agents, may issue citations for violations of this ordinance in the same manner as a county or city is authorized to do so by Chapter 5C, commencing with Section 853.5, of Title 4 of Part 2 of the Penal Code. This section is a declaration of Health and Safety Code section 13871.

Section 105.4.6 is amended by adding the following sentence at the end of Section 105.4.6 to read:

No remodeling, construction or installation of fire protection systems shall be conducted without approved plans.

Section 105.6 is amended to read:

105.6 Required operational permits. The fire code official is authorized to issue operational permits for the operations set forth in Appendix Chapter 1, Sections 105.6.1 through 105.6.56.

Section 105.6 is amended by adding subsections 105.6.48 through 105.6.56, to read:

105.6.48 Asbestos removal. A permit is required to conduct asbestos-removal operations regulated by Section 1418.

105.6.49 Automobile Wrecking and Dismantling. A permit is required to operate an automobile dismantling facility pursuant to Section 317.

105.6.49 Battery system. A permit is required to operate stationary lead-acid battery systems having a liquid capacity of more than 50 gallons (189 L) pursuant to Section 608.

105.6.50 Christmas tree sales. A permit is required to use a property for the purpose of selling cut Christmas trees.

105.6.51 Firework aerial display. A permit is required to conduct a firework display regulated by California Code of Regulations, Title 19 and Chapter 33 of this code.

105.6.52 Liquefied petroleum gases. A permit is required to store, use or handle liquefied petroleum gas inside buildings pursuant to Chapter 38.

105.6.53 Model rockets. A permit is required to sell or launch model rockets pursuant to California Code of Regulations, Title 19, Division 1, Article 17.

105.6.54 Temporary fire department access road for construction. A permit is required to use a temporary fire department access road for construction pursuant to Sections 1410.2 and 1410.2.1.

105.6.55 Temporary water supply. A permit is required to use a temporary water supply for construction of residential projects or subdivisions pursuant to Sections 1412.2 and 1412.3.

105.6.56 Tire storage. A permit is required to store more than 1,000 cubic feet ($28.3m^3$) of tires inside buildings pursuant to Chapter 25.

Section 105.7 is amended to read:

105.7 Required construction permits. The fire code official is authorized to issue construction permits for the operations set forth in Appendix Chapter 1, Sections 105.7.1 through 105.7.21.

Section 105.7 is amended by adding sections 105.7.14 through 105.7.21 as follows:

105.7.14 Access for fire apparatus. Plans shall be submitted to the fire code official for the purpose of determining whether adequate access for fire apparatus exists for all facilities, buildings or portions of buildings either constructed or moved into the District pursuant to Section 503.

105.7.15 Construction, alteration, or renovation of a building for which a building permit is required. Plans shall be submitted to the fire code official for all land developments or improvements proposed within the jurisdiction where a building permit is required.

105.7.16 Demolition of a building. A permit is required for the demolition of a building pursuant to Section 1419.

105.7.17 Medical gas systems. A construction permit is required for the installation of or modification to a medical gas system pursuant to Section 3006.

105.7.18 Refrigeration equipment. A permit is required to install a mechanical refrigeration unit or system regulated by Chapter 6.

105.7.19 Security gates. A permit is required to install a gate across a fire apparatus access road pursuant to Section 503.

105.7.20 Subdivision of land. Plans shall be submitted to the fire code official for all land developments or improvements proposed within the jurisdiction that involve the subdivision of land.

105.7.21 Water supply for fire protection. Plans shall be submitted to the fire code official for the purpose of determining whether adequate water supplies and fire hydrants are provided for all facilities, buildings or portions of buildings either constructed or moved into the District pursuant to Section 508.

Section 108 is amended in its entirety to read:

108.1 Board of Appeals established. In order to hear and decide appeals of orders, decisions or determinations made by the fire code official relative to the application and interpretation of this code, there is hereby created a board of appeals. The board of appeals is comprised of the Board of Directors.

108.2 Appeals in a State Fire Marshal regulated occupancy. When a request for an alternate means of protection has been denied by the enforcing agency in an occupancy regulated by the State Fire Marshal, the applicant may file a written appeal to the State Fire Marshal for consideration of the applicant's proposal. In considering such appeal, the State Fire Marshal may seek the advice of the State Board of Fire Services. The State Fire Marshal shall, after considering all of the facts presented, including any recommendations of the State Board of Fire Services, determine if the proposal is for the purposes intended, at least equivalent to that specified in these regulations in quality, strength, effectiveness, fire resistance, durability and safety, and shall transmit such findings and any recommendations to the applicant and to the enforcing agency.

Section 109.3 is amended in its entirety to read:

109.3 Violation penalties. Every person who violates any provision of this fire code is guilty of a misdemeanor. The imposition of one penalty for any violation shall not excuse the violation or permit it to continue; and all such persons shall be required to correct or remedy such violations or defects within a reasonable time; and when not otherwise specified, each ten (10) days that prohibited conditions are maintained shall constitute a separate offense. The application of the aforesaid penalty shall not be held to prevent the enforced removal of prohibited conditions. This section is a declaration of Health and Safety Code section 13871 and is not intended to create a different or separate penalty.

Section 111.4 is amended to read:

111.4 Failure to comply. Any person who continues any work after having been served with a stop work order is subject to citation, except any work that a person is directed by the fire code official to perform to remove a violation or unsafe condition.

Section 112 is added to Appendix Chapter 1 to read:

112 Fees for plan review, inspection and permits established. The Board of Directors may establish a schedule of fees to be charged and collected for plan review, inspections, and permits.

Appendix B. Fire-Flow Requirements for Buildings.

Section B105.2, the exception, is amended to read:

Exception: A reduction in required fire-flow of up to 50 percent, as approved by the fire code official, when the building is provided with an approved automatic sprinkler system and installed in accordance with Section 903.3.1.1. The resulting fire-flow shall be not less than

1,500 gallons per minute (5678L/min) for the prescribed duration as specified in Table B105.1.

Appendix C. Fire Hydrant Locations and Distribution.

Section C103 is deleted in its entirety.

Table C105.1 is amended to read:

Table C105.1

Spacing of Fire Hydrants

Type of occupancy	**Average spacing between hydrants, in feet, subject to notes a, b, c, and d**	**Maximum distance from any point on a street or road frontage to a hydrant, in feet**
One-family or two-family dwellings	500	250
All others	300	150

Notes:

a. Reduce by 100 feet for dead-end streets or roads

b. Where streets are provided with median dividers, or have a traffic count of more than 30,000 vehicles per day, hydrants shall be located on both sides of the street and be on an alternating basis. Hydrant spacing shall comply with the type of occupancy, or with note c if no structures.

c. Where new water mains are extended along streets and where hydrants are not needed for protection of structures or storage areas, fire hydrants shall be spaced every 1,000 feet.

d. A fire hydrant shall be provided within 250 feet of a fire trail access point off a public or a private street.

Appendix D Fire Apparatus Access Roads.

Section D103.5 is amended by amending criteria 1 and adding criteria 8, to read:

1. The minimum clear width shall be 20 feet (6096mm.)

   Exception: For one-family or two-family dwellings, 16 feet clear width is acceptable.

8. All gates shall be installed and located a minimum of 30 feet off the street.

Section D103.6.1 is amended to read:

D103.6.1 Roads 20 feet in width. Fire apparatus access roads less than 20 feet wide shall be posted on both sides as a fire lane.

Section D103.6.2 is amended to read:

D106.6.2 Roads more than 20 feet wide but less than 28 feet. Fire apparatus access roads more than 20 feet wide but less than 28 feet wide shall be posted on one side of the road as a fire lane.

Section D103.6 is amended by adding subsection D103.6.3 to read as the follows:

D103.6.3 No Parking. Fire Lane signs shall include the following in one-inch-high letters along the bottom portion of the sign: California Vehicle Code (CVC) Section 22500.1.

Appendix H. Hazardous Materials Management Plans and Hazardous Materials Inventory Statements.

Section H1.1 is amended by adding the following sentence, to read:

Hazardous Material Management Plans and Inventory Statements required by the Contra Costa County Health Services Department will be accepted in lieu of the requirements of Appendix H.

SECTION 3. REPEAL OF FIRE CODE.

Ordinance No. 2002-32, adopting the 2001 California Fire Code with amendments, is hereby repealed.

SECTION 4. VALIDITY.

The Contra Costa County Board of Supervisors declares that if any section, paragraph, sentence or word of this ordinance or of the 2007 California Fire Code as adopted and amended herein is declared for any reason to be invalid, it is the intent of the Contra Costa County Board of Supervisors that it would have passed all other portions or provisions of this ordinance independent of the elimination here from any portion or provision as may be declared invalid.

SECTION 5. MORE RESTRICTIVE REQUIREMENTS.

If requirements more restrictive than those in this fire code are adopted by the city of Antioch, Clayton, Concord, Lafayette, Martinez, Pittsburg, Pleasant Hill, San Pablo, or Walnut Creek, or the County of Contra Costa, those requirements will apply only within the jurisdiction adopting those requirements.

CONTINUED ON NEXT PAGE

SECTION 6. EFFECTIVE DATE.

This ordinance becomes effective 30 days after passage, and within 15 days of passage shall be published once with the names of supervisors voting for and against it in the Contra Costa Times, a newspaper published in this County.

Passed on _____, by the following vote:

AYES:
NOES:
ABSENT:
ABSTAIN:

ATTEST: JOHN CULLEN,
Clerk of the Board of Supervisors
and County Administrator

_____
Board Chair

By: _____
Deputy

[SEAL]

TLG:
H:\2007\Fire Districts\CCCFPD\2007 fire code - final.doc

Contra Costa County Fire Protection District

Fire Chief
KEITH RICHTER

December 4, 2007

RECEIVED
DEC 6 - 2007
CITY OF LAFAYETTE

Steven Falk, City Manager
City of Lafayette
3675 Mt. Diablo Boulevard #210
Lafayette, CA 94549

Dear Mr. Falk:

The purpose of this memorandum is to present to the City of Lafayette copies of the Contra Costa County Fire Protection District's (CCCFPD) recently adopted Fire Code Ordinance for ratification by your City Council.

On December 4 of this year, the Contra Costa County Board of Supervisors voted to adopt the 2007 California Fire Code (CFC) as amended by the Fire District.

Enclosed for your review is a copy of the ordinance adopting the 2007 California Fire Code. I have also provided below a brief description of the proposed ordinance and changes that will provide a much needed requirement for the protection of life and property:

Fire Code Ordinance 2007- 47: The CCCFPD has worked closely with neighboring fire jurisdictions in an effort to maintain consistency and uniformity in the writing of this ordinance. As you review the proposed ordinance, you will notice that the Fire District is proposing to lower the threshold as to when new commercial buildings would be required to install automatic fire sprinklers. Page 14, Table 903.2 identifies those thresholds. The Fire District has determined that the proposed ordinance will have no fiscal or significant impact on the city.

As I am sure that you are aware, automatic fire sprinklers are universally accepted as alternatives to some forms of construction separations, interior corridor construction, and occupancy separation to list a few. Furthermore, fire sprinklers in commercial buildings have been proven to reduce the loss of down time that often results from a fire, thus allowing businesses to return to normal operation in a shorter period of time.

It is the Fire District's intention to partner with local city governments and building officials to include the installation of fire sprinklers in all newly constructed single-family homes throughout the county beginning January 2009. Because the Fire District feels strongly about providing safety for the citizens and our fire fighters, we are planning to provide work-shops that will include city governments, building and planning officials, and builders and developers to better inform these groups of the importance of fire sprinklers and their effect on future communities.

Upon your review of the proposed ordinances, please contact me at 925.941.3520 so a meeting can be arranged to address any issues that you may have.

The Fire District looks forward to working with the city in an effort to keep the community we serve safe.

Sincerely,

Richard Carpenter, Fire Marshal
Direct: 925-941-3520
rcarp@cccfpd.org

Sent: Wednesday, February 06, 2008 8:03 AM
To: Falk, Steven; Srivatsa, Niroop
Subject: Fire Code Adoption Up-Date

To: All City Managers and Building Officials

The purpose of this e-mail is to touch base with you as to the City's progress on the adoption of the 2007 Building Code and the 2007 Fire Code as amended by the Contra Costa County Fire Protection District (CCCFPD), and also to clear up some misconceptions regarding the Fire District's amendments to the Fire Code.

The Fire Code has for many years been considered the maintenance code to the Building Code. After buildings have been constructed, it has been the responsibility of local fire jurisdictions to ensure that businesses maintain a safe operation so not to endanger their employees, customers, the community, and ultimately emergency responders, such as police and fire fighters.

The proposed Fire Code with the Fire District's amendments is for the most part no different than previous Fire Codes in their intent or application. However, there are two main differences:

- All of the standards for emergency apparatus access roads, fire flow, and hydrant locations have are the same standards that have been enforced by the CCCFPD for over 30 years. It is the position of the Fire Chief that these policies and standards be incorporated into the ordinance in an effort to maintain consistency and standardization throughout the district. Both the Building Code and Fire Code recognize that fire departments are best suited in understanding their needs, and gives full authority to the Fire Chief to establish these standards. In fact, the building code doesn't address these issues for that very reason.

- The second is the Fire Chief's desire to lower the square footage thresholds as to when new buildings would require fire sprinklers. This clearly is a building standard and requires an approval from local city governments to adopt these changes. As a side note, the lower thresholds proposed have been approved and adopted by the County Board of Supervisors and is now enforceable within the County and unincorporated areas. These lower thresholds are also incorporated into the San Ramon Valley and Moraga/Orinda fire jurisdictions.

Besides the fact that fire sprinklers do save lives, which is the Fire District's primary goal, they also reduce dollar loss due to fires by lowering repair costs, shortening down time, and thus allowing businesses to open sooner,

and ultimately minimizing revenue loss to the community. One additional benefit that is often over-looked is that most insurance companies also recognize the benefits of having fire sprinklers and often provide lower rates to those building owners and businesses with fire sprinklers.

Currently within the CCCFPD, whenever a fire is reported in a commercial building, our standard response is the closest four engines and two quints/truck companies and a Battalion Chief. From a service provider's standpoint, when buildings are equipped with fire sprinklers, emergency personnel can focus their primary efforts on search and rescue while the fire sprinklers are controlling the fire within the area of origin. Furthermore, in almost every fire that has occurred in a fire sprinklered building, the incident was easily handled by the first three units to arrive, thus allowing the remaining equipment to stay in service for the surrounding area.

While I can go on forever as to the short and long term benefits of fire sprinklers, I do not want to digress from the overall importance of this message, and that is the Fire District believes we are proposing a responsible ordinance in an effort to provide a reasonable degree of fire and life safety and keeping our citizens and communities safe from fire.

In closing, I can only request an opportunity to meet with you and further discuss the adoption of the ordinance to address any concerns you may have. I have also been directed to talk before your city councils in an effort to discuss the Fire District's position and to address any of the councils concerns regarding the proposed Fire Code ordinance. Please feel free to contact me at your earliest convenience to set up a meeting and discuss this issue.

Respectfully,
Richard Carpenter, Fire Marshal
Contra Costa County
Fire Protection District

From: Carpenter, Rick [mailto:RCarp@cccfpd.org]
Sent: Wednesday, March 05, 2008 10:52 AM
To: 'jjackel@ci.antioch.ca.us'; 'dlanderos@ci.brentwood.ca.us'; Falk, Steven; 'bsmith@ci.oakley.ca.us'; 'mnielsen@ci.pleasant-hill.ca.us'; 'jcatalano@ci.pleasant-hill.ca.us'; 'mgrisham@pittsburg.ca.us'; 'brocka@ci.san-pablo.ca.us'; 'pokorny@ci.walnut-creek.ca.us'; 'motgomery@ci.oakley.ca.us'; 'lydia@ci.concord.ca.us'; 'vphillip@ci.concord.ca.us'
Subject: Fire Code Ordance -IMPORTANT-

City Managers,
The purpose for this e-mail is to obtain an update on your city's progress relating to the review and ratification of the Fire Code Ordinance, County Board of Supervisors Resolution 2007-47 as submitted. As you know, spring is just around the corner which for the Fire District means the beginning of the hazardous fuel (weed) abatement season. Each year the Fire District begins sending out notices in April to those property owners where we have conducted abatement activities in the past and those that were discovered too late to abate the previous year. This year will be no different, except in those cities that have not ratified the ordinance. Without city ratification of the ordinance, the Fire District will not have the authority to notify and abate those properties that pose a threat to the community. Most cities within the county have adopted the 2007 California Fire Code (CFC) as approved by the State; however, the CFC does not address the abatement of hazardous fuels nor did it adopt the appendices within the code giving authority to the local fire jurisdiction to enforce the Fire Code. Without this authority the Fire District will have to route all weed complaints to the appropriate city and the abatement will then be the responsibility of local government.

On a similar note, unless cities also adopt the appendices in their adoption of the CFC, the Fire District will have little authority to inspect and regulate occupancies with hazardous materials, issue permits of operation, issue citations for continued violations, require fire hydrants and their placement, regulate the quantities of hazardous materials including, once again, the abatement of hazardous fuels. In years past it has been the Fire District's responsibility to determine the fire and life safety needs of the community. Those services include but are not limited to: fire and life safety inspections, regulation and issuance of permits, determine fire flow requirements, the plan review of fire and life safety systems for buildings and special fire protection systems (e.g. hood & duct, spray booths, etc.). Without the adoption of the ordinance and its appendices as proposed, those services identified, will most likely be the responsibility of local government. The Fire District will continue to review plans and inspect only those occupancies such as public and private schools (Group E occupancies) , apartments, hotels/motels (Group R occupancies) hospitals and care facilities (Group I occupancies) and high-rise buildings throughout the District.

As your Fire Marshal, I feel it is important to inform you of the position both local government and the Fire District is facing without an adopted ordinance. If you have any questions and wish to discuss the ordinance, then please contact me by phone or e-mail.

Sincerely,
Richard Carpenter, Fire Marshal
Contra Costa County Fire District
2010 Geary Road
Pleasant Hill, CA 94523
Office: 925-941-3520
Fax: 925-941-3309
rcarp@cccfpd.org

2007 California Fire Code as Amended

The following information is the Contra Costa County Fire Protection Districts reasoning for amendments to the 2007 California Fire Code.

Code Reference	Reason for Change
SECTION 3. Establishment of limits of the storage of hazardous materials.	This section has been amended to prohibit the storage of hazardous materials in residential areas and any area which is zoned for other than commercial, industrial, or agricultural use.
SECTION 4. Establishment of limits of the storage of compressed natural gas.	This section has been amended to prohibit the storage of compressed natural gas in residential areas and any area which is zoned for other than commercial, industrial, or agricultural use.
SECTION 5. Establishment of limits of the storage of stationary tanks of flammable cryogenics fluids.	This section has been amended to prohibit the storage of stationary tanks of flammable cryogenics fluids in residential areas and any area which is zoned for other than industrial use.
SECTION 6. Establishment of limits of the storage of liquefied petroleum gas.	This section has been amended to limit the storage of liquefied petroleum gas any area which is zoned for other than commercial, industrial, rural, or agricultural use.
SECTION 7. Establishment of limits of explosive and blasting agents.	This section has been amended to prohibit the storage of explosive and blasting agents in any area which is zoned for other than industrial or agricultural use.
SECTION 8. Establishment of limits of storage of flammable or combustible liquids in outside aboveground tanks; bulk plants or terminals; and bulk transfer operations is to be prohibited.	This section has been amended to prohibit the storage of flammable liquids in above ground tanks in any area which is zoned for other than commercial, industrial, or agricultural use; and to limit the operation of bulk plants and/or transfer terminals in any central business district, urban or suburban area as defined by this Code.
SECTION 9. AMENDMENTS TO THE CALIFORNIA FIRE CODE.	
202 Definitions.	Definitions section is amended to define terms reflect descriptions specific to local terminology.
304.1.2 Vegetation.	Definition of vegetation is consistent with pervious codes.
311.2 Safeguarding vacant premises.	This section has been amended to insure that fire protection systems remain operational while building is vacant and secure.
Chapter 3 General precautions against fire Exterior Fire Hazard Control	
316 Exterior Fire Hazard Control	This section is added to ensure the control of hazards on properties. 2007 IFC did not include requirements addressing the abatement of exterior hazards. Section 316.1.1 thru 316.7.2 has been renumbered to coincide with the 2007 CFC. This section has been carried forward from previous code.

316.1.2 Jurisdictional Authority.	Establishes that the Board of Supervisors as the supervising, legislative and executive authority of this jurisdiction hereby delegates to the Board of Fire Commissioners of this jurisdiction all its powers, duties and rights to clear or order the clearing of rubbish, litter or other flammable material where such flammable material endangers the public the safety by creating a fire hazard.
316.1.3 If no Board of Fire Commissioners has been appointed.	The Board of Supervisors shall retain its, powers and rights to act.
316.1.4 Contract for Services.	This Board of Supervisors reserves and retains the power to award a contract for fire hazard abatement work.
316.2 Definitions. Weeds, Rubbish, Streets, Person, Defensible Space, Priority Hazard Zone, Reduced Fuel Zone, and Cost of Abatement.	**Weeds.** Means all weeds growing upon streets or private property in this jurisdiction that create a fire hazard. **Rubbish.** Means waste matter, litter, trash, refuse, debris when dry may become a fire hazard. **Streets.** Includes alleys, parkways, driveways, sidewalks, and areas between sidewalks and curbs, highways, public right of ways, private road, trails, easements, and fire trails. **Person.** Includes individuals, firms, partnerships, and corporations. **Defensible Space.** The area within the perimeter of a parcel providing the key point of defense from an approaching wildland. **Priority Hazard Zone.** An area where the threat from wildfire is more severe due to proximity to open space, topography, density of homes and the amount of vegetation. **Reduced Fuel Zone.** The area that extends from thirty (30) feet to one hundred (100) feet or more away from the structure. **Cost of Abatement.** All expenses incurred by the jurisdiction in its work of abatement including administrative costs.
316.4.1.1 Prohibition.	This section requires that no person who has any ownership or possessory interest in or control of parcel of land shall allow to exist, any hazardous rubbish or weeds, trees, or other vegetation, which constitutes a fire hazard, and that destruction by burning within this jurisdiction is unlawful.
316.4.1.2 Specific Requirements.	This section requires that the District develop minimum abatement standards for land in residential, business, industrial areas, or land which is unused or vacant.
316.4.1.3 Specific Requirements.	This section requires that the district develop minimum abatement standards for land in rural or rural residential areas.
316.4.1.4 General Requirements.	This section requires that the district develop minimum abatement standards, which apply regardless of the area in which property is located
316.5.1 Abatement Order.	This section allows the code official of this jurisdiction to order the abatement of the weeds and rubbish as well as established time line in which the abatement work shall be performed. Furthermore this section outlines due process for notifications, and notice specifications.

316.5.2 Hearing Date.	This section establishes time lines for hearings including mailings and cause for extensions.
316.5.3 Contract Award.	This section outlines if the owner fails to comply with the order, that the fire code official may have the weeds and rubbish abated, and states that if a contract is awarded, it shall be by public bid, awarded to the lowest responsible bidder. In addition any contract previously awarded which has been fully extended may be extended on its same terms and conditions for one year.
316.5.4 Abatement Report of Costs.	This section requires the fire code official or his or her designee abating the nuisance keep an account of the cost of abatement on each separate parcel of land and shall provide an itemized report to the Board of Fire Commissioners. Before the report is submitted to the Board of Fire Commissioners, a copy of it shall be posted for at least three days on or near the chamber door of the Board with a notice of the time and when the report will be submitted to the Board for confirmation. The amounts of the cost, including administrative costs, for abating the nuisance shall constitute special assessment against the respective parcels of land, and a lien placed on the property.
316.5.5 Cost Assessments.	This section describes process followed upon confirmation of the report and that a copy of the report of cost be sent to the County Auditor.
316.6 Alternate Mitigation. 316.6.1 Firebreaks/Fuelbreaks.	This section allows the fire code official to order in lieu of abatement may order the preparation of firebreaks/fuelbreaks around parcels of property.
316.7.1 Peat Fire.	This section requires that each person, firm, corporation, or association not to permit a peat fire in or a fire involving combustible vegetable materials under the surface of the natural ground to remain upon his property and that all necessary precautions to extinguish any subsurface fire involving peat or vegetable material be taken at his own cost and expense.
316.7.2 Fire Suppression Costs.	This section requires that any person who has not taken reasonable precautions within a reasonable time to extinguish or minimize such fire or combustion, will be subject to any costs incurred by the Fire District in fighting the fire and for the cost of proving rescue or emergency medical services.
317 Automobile Wrecking yards.	This section has been added because the 2007 CFC did not address the hazards of automobile wrecking yards. This section was carried forward from the 2001 CFC with amendments to provide emergency access and a water supply for fire fighting.

Chapter 4 Emergency Planning and Preparedness.	
401.3.1 Reporting of Emergencies and False Alarms.	This section retiled to "Making false reports" due to the increase in fire alarm systems reporting failures resulting in and reporting false alarms. 4 or more within 180 day period.
401.3.1.1 False alarm fee.	This section has been added to allow the fire district to charge for repeated false alarms.
Chapter 5 Fire Service Features	
All weather driving surface.	This definition was developed due to the inability to access construction projects all year, for emergencies including medicals, rescues and fire fighting purposes.
503.1.1 Buildings and facilities	This is intended allow the fire code official to approve alternatives such as installation of fire sprinklers where existing structures do not meet current access or water supply when remodeled or added onto.
503.1.2 Additional access.	This section clearly defines required access for residential developments.
503.1.2.2 Access to Open Spaces	This is intended to provide access to open space for firefighting purposes to protect structures from wildland fires
503.2.1.1 Fire equipment outsets or turnouts.	This is intended to provide areas where emergency apparatus or feeing citizens can safely pull aside on narrow drive/roads.
503.2.1.2 Parking of vehicles on fire apparatus access roads.	This is intended to establish limits on parking while still maintain access for emergency apparatus.
503.2.7 Grade.	This is to establish road surface requirements for grades beyond 10%. Fire apparatus requires solid no-slip surfaces for steep grades.
Specifications. Sections 503.2.8., 503.2.9., and 3.2.10.,	This section is amended to provide clear specifications road widths, departure angles and weight loads. **Note: These specifications were developed based on actual performance rather than national standards.**
503.3.1 Street names and addressing.	Requires developers and builders to submit street names and addresses for review and approval.
508.1.1 Suburban and Rural Water Supply.	Establishes minimum water requirements for firefighting purposes in single family homes.
511 Public safety radio building enhancement systems.	This section is intended to provide and improve radio communication for first responders (i.e. police, fire and medical) in large buildings, below grade parking area etc... where radio communications is needed.
Chapter 6 Building Services and systems	
603.6.6 Sparks from chimneys.	Chimneys used with fireplaces or heating appliances in which solid or liquid fuel shall be equipped with a spark arrester as required for incinerators by the Mechanical Code.
608 Stationary storage battery systems.	This is to require that businesses that maintain battery storage obtain a permit from the fire district for the operation of.

Chapter 8 Interior Finish, Decorative Materials and Furnishings	
806 Decorative vegetation in new and existing buildings	Requires businesses provide proper flame retardance for decorative vegetation including Christmas trees.
Chapter 9 Fire Protection Systems	
903 Automatic sprinkler systems	**The entire section has been amended to establish minimum levels of fire protection (fire sprinklers) in new and existing buildings based on square footage, occupancy classification, and construction type. This section is NOT intended to require the installation of fire sprinklers in buildings in compliance at the time of adoption of this code. Only those buildings or occupancies that change use and require a higher degree of fire protection or where the square footage exceeds Table 903.2 or where the construction type is not allowed for the intended use, will fire sprinklers be required.**
903.2 Where required.	This section has been amended so that approved automatic sprinkler systems be installed in new buildings and structures on the basis of occupancy classification, type of construction and square footage as specified in Table 903.2.
903.2.1 Group A.	This section has been amended to require an automatic sprinkler system be provided throughout buildings containing a Group-A occupancies where the fire area exceeds the square footage based on type of construction in Table 903.2. in: 903.2.1.1 Group A-1. 903.2.1.2 Group A-2. 903.2.1.3 Group A-3. 903.2.1.4 Group A-4. 903.2.1.5 Group A-5. See *California Fire Code*.
Group B.	This occupancy group has been included so that In Group B occupancies an automatic sprinkler system shall be provided throughout all buildings where the fire area exceeds the square footage based on type of construction in Table 903.2.
903.2.2 Group E (private)	This section has been amended to require that an automatic sprinkler system shall be provided for Group E occupancies fire area exceeds the square footage based on type of construction in Table 903.2.
903.2.3 Group F-1	This section has been amended to require that an automatic sprinkler system shall be provided throughout all buildings containing a Group F-1 occupancy where the fire area exceeds the square footage based on type of construction in Table 903.2
903.2.3.2 Group F-2	This section has been amended to require that an automatic sprinkler system shall be provided throughout all buildings containing a Group F-2 occupancy where the fire area exceeds the square footage based on type of construction in Table 903.2.

903.2.6 Group M.	This section has been amended to require that an automatic sprinkler system shall be provided throughout buildings containing a Group M occupancy where the fire area exceeds the square footage based on type of construction in Table 903.2
903.2.7 Group R 903.2.7.1 Group R.	Section 903.2.7 has been amended See *Contra Costa County and Crockett-Carquinez Fire Protection Districts, Residential Fire Sprinkler Ordinance for R-3 Occupancies 2007-49*
903.2.8 Group S-1.	This section has been amended to require that an automatic *sprinkler system shall be provided throughout all buildings* containing Group S-1 occupancies where the fire area exceeds the square footage based on type of construction in Table 903.2.
903.2.8.1 Repair garages.	This section has been amended to require that an automatic sprinkler system be provided throughout all buildings containing a repair garage where the fire area exceeds the square footage based on type of construction in Table 903.2 for a Group S-1 occupancy.
903.2.9 Group S-2.	This section has been amended to require that an automatic sprinkler system shall be provided throughout all buildings containing Group S-2 occupancies where the fire area exceeds the square footage based on type of construction in Table 903.2.
903.2.9.1 Group S-2.	This section has been amended to require aircraft hangers used for the storage of aircraft and where the fire area exceeds 40,000 square feet NFPA 409 shall identify minimum fire protection requirements.
903.2.9.2 Group U.	This section has been amended to require that an automatic sprinkler system shall be provided throughout all buildings containing Group U occupancies where the fire area exceeds the square footage based on the type of construction in Table 903.2.
903.2.10.3 Buildings three stories or more than 35 feet in height.	This section has been amended to require that an automatic sprinkler system shall be installed in all occupancies regardless of type of construction or floor area where when the building is three or more stories or more than 35 feet in height measured in accordance with California Building Code.
903.3.5.3 Non-permissible water supply storage.	This section has been amended to disallow the use of swimming pools, ponds, and underground cisterns for in lieu of required water supply for firefighting protection.
Section 903.6 Existing Buildings.	This section has been amended to clarify provisions of this section that are intended to provide a reasonable degree of safety in existing structures not complying with the minimum requirements of the *International Building Code* by requiring installation of an automatic fire-extinguishing system.

903.6.4 Additions, alterations, or remodels of R occupancies.	This section has been added to refer to CCC Fire Protection District Ordinance 2007-49
907.15.1 Listing of fire alarm systems	This section has been added to ensure that a system when monitored, is supervised by and approved central station.
914.12 Computer rooms.	This section has been amended to avoid false reports by smoke alarm and repeated false alarms.
Table 903.2	Table 903.2 has been added to identify minimum requirements when automatic fire sprinklers are required for new and existing buildings, where the fire area exceeds the square footage based on occupancy classification and type of construction. (C.B.C. 2007)
Chapter 10 Means of Egress	
1024.6.1 Exit discharge surface	This section has been added to require that an exit pathway terminate at a public way. (i.e. sidewalk, approved drive etc...)
Chapter 14 Fire Safety During Construction and Demolition	
1401.3.1 Asbestos-removal operations.	This section has been added to require a permit to be obtained ensure that contractors notify fire district when asbestos removal operations are in progress.
1401.3.2 Temporary fire department access road for construction.	This section has been added to require a permit to utilize a temporary fire department access road for construction. This will require an inspection by the fire district to ensure access during construction.
1401.3.4 Temporary fire access roads for construction of 1 residential (R-3) unit.	This section was added to require a permit to utilize a temporary fire department access road for construction. This will ensure emergency access during construction.
1401.3.4 Temporary water supply.	This section has been added to require a permit to utilize a temporary water supply for construction of residential projects or subdivisions.
1401.3.5 Automobile Wrecking Yard.	This is section is added to require a permit to operate an automobile wrecking or dismantling yard or similar operations.
1402.2 Waste disposal.	This section was amended to ensure that combustible materials are removed from structures under construction and disposed of properly.
1410 Access for firefighting.	This section amended in its entirety to require that construction sites for commercial and residential, maintain access for emergence apparatus. This section also identifies requirements for the staging of materials does not restrict emergency access.
1412 Water supply for fire protection	This section has been amended in its entirety to specify requirements for providing a temporary water supply for subdivisions and single family homes during construction until permanent systems can be installed, tested and placed into service.
Section 1418. Removal of Asbestos.	This section is amended to require contractors to notify the fire district when asbestos removal operations are begin and date of completion. The information is then provided to dispatchers for first responder notification.

Section 1419. Demolition of structures.	This section has been amended to require contractors to notify the fire district of the demolition of buildings prior to demolition.
Chapter 27 Hazardous Materials	
2701.1 Scope.	This section is amended for the prevention, control and mitigation of dangerous conditions related to storage, dispensing, use and handling of hazardous materials.
2701.1.2 Coordinated enforcement.	This section has been added where CCC Health Services and the District coordinate efforts so as to not require duplication of time and resources regarding hazardous material regulations. Where CCC Health Services regulations and CFC regulations conflict, the more restrictive provisions shall prevail. **Exception:** Where state or county regulations specifically limit or preempt local regulations to be more restrictive.
2701.1.3 Established limits.	This section has been amended so that the storage of hazardous materials and maximum quantity do not exceed allowable limits onsite.
2701.5.1.1 Alternate hazardous material management plan (HMMP).	This section has been added to allow hazardous material handlers to submit Haz-Mat management plans providing they meet CCC Health Services regulations.
2701.5.2.1 Alternate hazardous material inventory statement (HMIS).	This section has been added to allow hazardous material handlers to submit Haz-Mat inventory plans providing they meet CCC Health Services regulations.
2701.5.3 Emergency response support information.	This section has been added where Haz-mat information may be required to be provided for emergency responders to be located in a locked cabinet and in accordance with district policy.
2703.9.1.2 Documentation.	This section has been added to insure that proper documentation of personnel training and written procedures that comply with state and federal regulations are in compliance.
Chapter 31 Corrosive Materials	
3001.1.1 Established limits and maximum capacity	This section has been added to establish that the storage of CNG is prohibited within the limits established and limits of districts in which such storage is prohibited.
Chapter 32 Cryogenic Fluids	
3201.1.1 Established limits.	This section has been added to prohibit the storage of Flammable cryogens in excess of limits established by law and limits of established within the district.
3204.3.1.1 Location.	This section has been amended to limit the storage of stationary containers and to restrict the location cryogenic fluids in diked areas or with other hazardous materials and prohibit the storage of flammable cryogenic fluids in stationary containers outside of buildings.
Chapter 33 Explosives and fireworks.	
Chapter 33 Explosives and fireworks.	This section has been amended to prohibit the possession, manufacture, storage, sales, handling and use of fireworks within the district.

3301.3 Rocketry	This section has been added to ensure that the storage, handling and use of model and high-power rockets comply with the *California Fire Code, Title 19.*
3301.3.1 Ammonium nitrate.	This section has been added to ensure that the storage and handling of ammonium nitrate comply with the requirements of Chapter 40 and NFPA 490
3301.4 Residential uses.	This section has been added to ensure that no person keeps or stores, any explosives, fireworks or pyrotechnic material at or near any resident.
3301.5 Sale and retail display.	This section has been added to prohibit the possession, manufacture, storage, sales, handling and use of fireworks or pyrotechnic materials within the district is prohibited.
3308.2 Permit required.	This section has been added to requiring permits to conduct a fireworks aerial display.
3308.2.1 Prohibited and Limited Acts.	This section has been added to prohibit the storage of explosive materials and where the storage of explosive materials is permitted the quantities of explosives and distances shall be in accordance with *International Fire Code.*
3308.3 Financial responsibility.	This section has been added to require that before a permit is issued, the applicant shall file with the district a bond or liability insurance policy for payment of all damages to persons or property which arise from, or are caused by which any judicial judgment results.
Chapter 34 Flammable and Combustible Liquids	
3404.2.9.5.1 Locations where above-ground tanks are prohibited.	This section has been amended to prohibit the storage of Class I and II liquids in above-ground tanks outside of buildings, unless otherwise approved. **Exception:** Protected aboveground tanks.
3404.2.11.5.3 Secondary containment.	This section has been amended to require that underground tanks used for the storage of flammable and combustible liquids be provided with secondary containment or in an approved underground vault.
3404.2.13.1.3 Out of service for one year.	This section has been added to require that underground tanks that have been out of service for a period of one year shall be removed.
3404.2.13.1.3.1 Abandoned properties.	This section has been added to require that tanks taken out of service as a result of properties being abandoned or its use being changed shall be removed.
3404.2.13.1.4 Tanks abandoned in place.	This section has been deleted in its entirety.
3406.4.5.1 Established limits.	This section has been added to ensure that bulk plants or terminals receiving or storing flammable/combustible liquids are prohibited within the district except in approved locations.

3406.5.1.1.1 Established limits.	This section has been added to ensure that bulk transfer, and process transfer operations for receiving or transferring flammable or combustible liquids are prohibited within the limits established of districts and in approved locations.
Chapter 38 Liquefied Petroleum Gases	
3803.2.1.7 Use for food preparation.	This section has been amended to ensure that individual portable containers used, stored, or handled inside of buildings specific occupancies for the purposes of cooking, display, or similar use shall be limited in quantity and size of containers and that appliances use for cooking are listed and approved.
3804.2 Maximum capacity within established limits	This section has been amended to insure that the limits established by law restricting the storage of liquefied petroleum gas within heavily populated or congested areas.
Chapter 45 AMENDMENTS TO NATIONAL STANDARDS	
NFPA 13, 2002 Edition, Section 8.1 Basic Requirements.	(13) This section has been amended to require that system risers be located in common areas and that when risers are located inside buildings that they be located in stairways or in riser closets.
NFPA 13, 2002 Edition, Section 11.2.3.1.8 Restrictions.	(13) This section has been amended to require that in buildings (spec) of undeclared use structure height greater than 14 feet the fire sprinkler system be designed with a minimum design density as required by the fire code official. Where a subsequent occupancy requires a system with greater capability, it shall be the responsibility of the owner and/or the occupant to upgrade the system.
	(14) This section has been amended to require that in buildings (spec) of undeclared use with structure height less than 14 feet, the sprinkler system shall be designed with a minimum design density as required by the fire code official. Where a subsequent occupancy requires a system with greater capability, it shall be the responsibility of the owner and/or the occupant to upgrade the system.
NFPA 13R, 2002 Edition, Section 6.6.4 Fire Department Connection.	This section has been amended to require that fire department connections be a minimum 2½ inch for automatic fire sprinkler systems.
NFPA 72, 2002 Edition, Section 4.4.4.2.1 Installation and Design.	This section has been amended to identify the locations of Fire Alarm Control Units and fire alarm control panels be located in approve and accessible locations to be determined by the fire code official.
NFPA 72, 2002 Edition, Section 6.15.5.3 HVAC Systems.	This section has been amended to require that connections between fire alarm systems and the HVAC systems be monitored in accordance with applicable NFPA standards.

Appendix Chapter 1 Administration. Appendix Chapter 1 Administration	
101.1 Title. Section 101.1	This section has been amended to identify that these regulations be known as the Fire Code of the *Contra Costa County Fire Protection District*, hereinafter and referred to as "this code." The *California Fire Code* and *International Fire Code* adopted by reference, and that amendments, additions, and deletions shall become effective upon adoption.
102.1 Construction and design provisions.	This section is amended to identify where the fire code is applicable to the construction and design of structures.
102.1.1 Existing Non-complying Conditions.	This section has been amended for existing buildings which do not conform to current *California Building Code* or *California Fire Code* requirements may be required to install an automatic fire extinguishing system. **It shall be the responsibility of the fire code official and the building code official having jurisdiction to evaluate the work being performed all non-complying features, and determine if an automatic fire extinguishing system shall be required.** If mutual concurrence between the building code official and the fire code official cannot be reached, fire sprinklers will not be required.
104.1 General.	This section has been amended giving the fire code official authorization to enforce the provisions of this code and shall have the authority to render interpretations, and to adopt policies, procedures, rules and regulations in order to clarify the application of its provisions.
104.1.1 Fire prevention personnel and police.	This section has been amended providing the fire code official and his or her designated representative(s) to have the powers of peace officers while engaged in the performance of their duties with respect to the prevention, investigation, and suppression.
104.5 Notices and orders.	This section has been amended to authorize the fire code official to issue such notices or orders affect compliance.
104.5.1 Issuance of citations.	This section has been amended to authorize the fire code official, or his or her duly authorized agents, to issue citations for violations of this ordinance.
105.4.6 Retention of construction documents.	His section has been amended to require that no remodeling, construction or installation of fire protection systems be conducted without approved plans and that such approved plans be maintained on site throughout the term of the project.

105.6 Required operational permits.	This section has been amended to require operational permits for: 105.6.48 Asbestos removal. 105.6.49 Automobile Wrecking and Dismantling. 105.6.49 Battery system. 105.6.50 Christmas tree sales. 105.6.51 Firework aerial display. 105.6.52 Liquefied petroleum gases. 105.6.53 Model rockets. 105.6.54 Temporary fire department access road for construction. 105.6.55 Temporary water supply. 105.6.56 Tire storage.
105.7.6 Flammable and combustible liquids 105.7.6.1 Other agency permits	This section has been amended to require that the requirements of the CCC Health Services Environmental Division be complied with concurrently with requirements of the District.
105.7 Required construction permits.	This section has been amended to require permits: 105.7.14 To submit plans for access for fire apparatus. 105.7.15 To submit plans for construction, alteration, or renovation of a building for which a building permit is required. 105.7.16 For the demolition of a building. 105.7.17 To submit plans to install a medical gas system. 105.7.18 To submit plans to install a refrigeration equipment. 105.7.19 To install a security gates across a fire apparatus road. 105.7.20 To submit plans for a proposed subdivision of land. 105.7.21 To submit plans for water supply for fire protection.
108.1.1 Appeals in a State Fire Marshal regulated occupancy.	This section has been amended so that when a request for an alternate means of protection has been denied by the enforcing agency the applicant may file a written appeal to the state fire marshal for consideration.
109.3. Violation penalties.	This section has been amended in its entirety to inform any person who violates any provision of this Ordinance and of the California Fire Code and International Fire Code as adopted is guilty of a misdemeanor.
109.3.2 Penalties for working without approved plans.	This section has been added to inform every person who knowingly conducts construction operations without first obtaining approval from the fire code official will be subject to triple the cost of all plan review fees including all associated personnel costs.
111.4 Failure to comply.	This section has been amended to inform that any person, who continues work after having been served with a stop work order, shall be subject to citation.

Appendix Chapter 1 Administration Fees.	
112.1 Fees for plan review, inspection and permits established.	This section has been added to authorize the CCC Board of Supervisors may, by resolution establish a schedule of non-discriminatory fees to be charged and collected for plans review, inspections, and permits, to defray the District's costs to conduct or provide those services.
Appendix B	
Appendix B105.2 exception	This section has been amended to allow a reduction in required fire flow for building equipped with automatic fire sprinklers.
Appendix C	
Appendix C Fire hydrant Locations and Distribution.	This section has been amended in its entirety requiring fire hydrant spacing for specific needs that includes commercial, residential areas.
Appendix D Fire Apparatus Access Roads.	
Section D103.5 Fire apparatus access road gates,	This section has been amended to require a minimum street or road width of 20 feet. Roads that serves 1 or 2 single family dwellings mat be a minimum of 16 feet in width. Gates shall be installed/located a minimum of 30 feet off the street to allow emergency apparatus to pull safely off the main road.
Sections D106.6. No parking fire lane signs.	This section has been amended to require no parking signs depending on the width of the road.
Section D103.6.3 No parking fire lane signs.	This section has been added to specify language that shall be posted no parking fire lane signs.
Appendix H	
H1.1 Hazardous Material Management Plans	This section has been amended to allow Hazardous Material Management Plans and Inventory Statements as required by the CCC Health Service Department to be submitted to the fire code official.
SECTION 11. APPEALS.	
11.1 Appeals.	This section provides the applicant 30 day time frame to appeal the fire code officials decision to a Board of Appeals established in accordance with the *California Fire Code.*
SECTION 12. PENALTIES.	
12.1 Penalties.	This section has been added to require that any person who violates any of the provisions of the *California Fire Code* as adopted and amended herein or fails to comply therewith, or who violates or fails to comply with any order may be guilty of a misdemeanor..
12.2 Prohibited conditions.	This section has been added so that any person found guilty of a misdemeanor shall not prevent the enforced removal of prohibited conditions.
SECTION 13. REPEAL OF CONFLICTING ORDINANCES.	
13.1 Repeal.	This section has been added to repeal the previous Ordinance (2002-32), *Contra Costa County Protection District* and the *Crockett-Carquinez Fire District* (*California Fire Code*, 2001 Edition).

SECTION 14. VALIDITY.	
14.1 Validity.	This section has been added that the CCC Board of Supervisors as the governing body of the District hereby declares that any section, paragraph, sentence or work of this Ordinance or of the *California Fire Code* as adopted and amended herein be declared invalid, it is the intent of the CCC Board of Supervisors that it would have passed all other portions or provisions of this Ordinance.
SECTION 15. MORE RESTRICTIVE REQUIREMENTS.	
15.1 More restrictive requirements.	This section has been provided that in the event the Cities adopt more restrictive requirements, those more restrictive only apply within the jurisdiction adopting such requirements.

CROCKETT-CARQUINEZ FIRE PROTECTION DISTRICT
CONTRA COSTA COUNTY FIRE PROTECTION DISTRICT
EAST CONTRA COSTA FIRE PROTECTION DISTRICT

FINDINGS IN SUPPORT OF CHANGES, ADDITIONS AND DELETIONS TO THE STATE BUILDINGS STANDARDS CODE

The California Building Standards Commission has adopted and published the 2007 Building Standards Code, which includes the 2007 California Fire Code prepared and adopted by the State Fire Marshal. The statewide code becomes effective January 1, 2008.

Although the code applies statewide, Health and Safety Code sections 17958.5 and 18941.5 authorize a local jurisdiction to modify or change the statewide code and establish more restrictive standards if the jurisdiction finds that the modifications and changes are reasonably necessary because of local climatic, geological or topographical conditions.

Ordinance No. 2007-47 adopts the 2007 California Fire Code and amends it to address local conditions. Pursuant to Health and Safety Code section 17958.7, the Contra Costa County Board of Supervisors, as the Board of Directors of the Crockett-Carquinez Fire Protection District, the Contra Costa County Fire Protection District, and the East Contra Costa Fire Protection District, finds that the more restrictive standards contained in Ordinance No. 2007-47 are reasonably necessary because of the local climatic, geological, and topographic conditions that are described below.

LOCAL CONDITIONS: Local conditions have an adverse effect on the prevention of (1) major loss fires, (2) major earthquake damage, and (3) the potential for life and property loss, making changes or modifications to the 2007 California Fire Code necessary to provide a reasonable degree of property security and fire and life safety in each fire district.

The fire environment of a community is primarily a combination of two factors: the area's physical geographic characteristics and a historic pattern of urban-suburban development. These two factors, alone and combined, create a mixture of environments which ultimately determines the area's fire protection needs. Contra Costa County has distinct areas. They are: the West, which includes the City of San Pablo and the communities of North Richmond, El Sobrante, East Richmond Heights, and Crockett. The Central includes the Cities of Lafayette, Martinez, Pleasant Hill, Concord, Walnut Creek, Clayton and the communities of Clyde, Pacheco, Alhambra Valley and Alamo. The East includes the cities of

Antioch, Pittsburg, Brentwood, Oakley and the communities of Bay Point and Discovery Bay.

Because of the size of the County, the characteristics of the fire environment changes from one location to the next. Therefore there are a number of fire environments, each of which has its individual fire protection needs from two major oil refineries, to heavy industrial facilities, freeways, rail lines, waterways, port facilities, wildlands, urban and suburban town settings and major downtown areas. The Fire Protection Districts handles diverse responsibilities including refineries, electrical generating plants, residential, commercial, high rise, marinas, airport, shipboard, urban, freeways, rail lines and medical.

The local amendments to the 2007 California Fire Code have been evaluated by each fire district as a procedure for addressing the fire hazards and concerns within the district. The amendments will establish and maintain an environment for an acceptable level of risk of fire and life safety to all persons who work and live within the boundaries of each fire district.

Below are listed adverse local climatic, geological, and topographic conditions:

A. Climatic

1. Precipitation and Relative Humidity

(a) Conditions

Precipitation. Precipitation ranges in the West portion from 15 to 24 inches per year with an average of approximately 20 inches per year. 96% falls during the months of October through April and 4% from May through September. In the Central portion the precipitation ranges from 14 to 23 inches per year with an average of approximately 19 inches per year. 96% falls during the months of October through April and 4% from May through September. In the East portion the precipitation ranges from10 to 15 inches per year with an average of 13 inches per year. 93% falls during the months of October through April and 7% from May through September. This is a dry period of at least five (5) months each year. Additionally, all of the areas are subject to occasional drought.

Relative Humidity. Humidity remains in the middle range most of the year. It ranges from 24% to 74% during spring, summer, fall, and from 14% to 90% in the winter. During the summer and early fall months it drops to as low as 5%.

(b) Impact

Locally experienced dry periods cause extreme dryness of untreated wood shakes and shingles on buildings and non-irrigated grass, brush and weeds, which are often near buildings with wood roofs and sidings. Such dryness causes these materials to ignite very readily and burn rapidly and intensely. Gas fires due to gas line ruptures can also spark and engulf a single family residence during these dry periods.

Because of dryness, a rapidly burning gas fire or exterior building fire can quickly transfer to other buildings by means of radiation or flying brands, sparks or embers. A small fire can rapidly grow to a magnitude beyond the control capabilities of the Fire District resulting in an excessive fire loss.

2. Temperature

(a) Conditions

Temperatures have been recorded as high as 105 degrees F in the West, 112 degrees F in the Central and 114 degrees F in the East portion. Average summer highs are in the 75 to 95 degree range in the West, 75 to 98 degree range in the Central and 79 to 98 degree range in the East portions.

(b) Impact

High temperatures cause rapid fatigue and heat exhaustion of firefighters, thereby reducing their effectiveness and ability to control large building, wildland fires, and fires caused by gas line ruptures.

Another impact from high temperatures is that combustible building material and non-irrigated weeds, grass and brush are preheated, thus causing these materials to ignite more readily and burn more rapidly and intensely. Additionally, the resultant higher temperature of the atmosphere surrounding the materials reduces the effectiveness of the water being applied to the burning materials. This requires that more water be applied, which in turn requires more fire resources in order to control a fire on a hot day. High temperatures directly contribute to the rapid growth of fires to an intensity and magnitude

beyond the control capabilities of the Fire Districts in Contra Costa County. The change of temperatures throughout the County between very low and extreme highs contributes to a voltage drop in conductors used for power pole lines. This necessitates that voltage drops be considered.

3. Winds

(a) Conditions

Prevailing winds in the West portion of the Fire District are from the northwest and velocities are generally in the 5 to 23 mph range, gusting 7 to 35 mph during the summer months. 40 mph winds have been experienced occasionally and winds up to 55 mph have been experienced. Prevailing winds in the Central portion of the Fire District are from the west/northwest and velocities are generally in the 5 to 27 mph range, gusting 11 to 40 mph during the summer months. 50 mph winds have been experienced occasionally and winds up to 100 mph have been experienced. The northern area is subject to constant winds up and down the Sacramento River. Prevailing winds in the East portion of the Fire District are from the west and velocities are generally in the 8 to 35 mph range, gusting 15 to 40 mph during the summer months. 50 mph winds have been experienced occasionally and winds up to 120 mph have been experienced. The northern area is subject to constant winds up and down the Sacramento River.

(b) Impact

Winds such as those experienced locally can and do exacerbate fires, both interior and exterior, to burn and spread rapidly. Fires involving non-irrigated weeds, grass, brush, and fires caused by gas line ruptures can grow to a magnitude and be fanned to an intensity beyond the control capabilities of the fire services very quickly even by relatively moderate winds. When such fires are not controlled; they can extend to nearby buildings, particularly those with untreated wood shakes or shingles.

Winds of the type experienced locally also reduce the effectiveness of exterior water streams used by all Contra Costa County Fire Districts on fires involving large interior areas of buildings, fires which have vented through windows and roofs due to inadequate built-in fire protection and fires involving wood shake and shingle

building exteriors. Local winds will continue to be a definite factor toward causing major fire losses to buildings not provided with fire resistive roof and siding materials and buildings with inadequately separated interior areas, or lacking automatic fire protection systems, or lacking proper gas shut-off devices to shut off gas when pipes are ruptured, or lacking proper electrical systems. National statistics frequently cite wind conditions, such as those experienced locally, as a major factor where conflagrations have occurred.

B. Geological and Topographic

1. Seismicity

(a) Conditions

Contra Costa County is located in Seismic Risk Zone 4, which is the worst earthquake area in the United States. Buildings and other structures in Zone 4 can experience major seismic damage. Contra Costa County is in close proximity to numerous earthquake faults including the San Andreas Fault and contains all or portions of the Hayward, Calaveras, Concord, Antioch, Mt. Diablo, and other lesser faults. A 4.1 earthquake with its epicenter in Concord occurred in 1958, and a 5.4 earthquake with its epicenter also in Concord occurred in 1955. The Concord and Antioch faults have a potential for a Richter 6 earthquake and the Hayward and Calaveras faults have the potential for a Richter 7 earthquake. Minor tremblers from seismic activity are not uncommon in the area.

A study released in 1990 by the United States Geological Survey says that there is a 67% chance of another earthquake the size of Loma Prieta during the next 30 years, and that the quake could strike at any time, including today. Scientists, therefore, believe that an earthquake of a magnitude 7 or larger is now twice as likely to happen as to not happen.

Interstates 680, 80, 580 and State Route 4 run the length throughout Contra Costa County. These interstates and state routes divide the County into a west, south, north and east. An overpass or undercrossing collapse would significantly alter the response route and time for responding emergency equipment. This is due to limited crossings of the interstate and that in some areas there is only one surface street, which runs parallel to the interstate, which would be congested during a significant emergency.

Earthquakes of the magnitude experienced locally can cause major damage to electrical transmission facilities and to gas and electrical lines in buildings, which in turn start fires throughout the County. The occurrence of multiple fires will quickly deplete existing fire department resources; thereby reducing and/or delaying their response to any given fire.

(b) Impact

A major earthquake could severely restrict the response of all Contra Costa County Fire Districts and their capability to control fires involving buildings of wood frame construction, with ordinary roofing materials and flammable exteriors, or with large interior areas not provided with automatic smoke and fire control systems. Also, when buildings not equipped with earthquake structural support move off their foundations, gas pipes may rupture. Fires develop from line ruptures and spread from house to house, causing an extreme demand for fire protection resources. The proximity of large areas within the County to fault traces, necessitates adopting stricter structural construction standards.

2. Soils

(a) Conditions

The area is replete with various soils, which are unstable, clay loam and alluvial fans being predominant. These soil conditions are moderately to severely prone to swelling and shrinking, are plastic, and tend to liquefy.

(b) Impact

Throughout Contra Costa County, the topography and development growth has created a network of older, narrow roads. These roads vary from gravel to asphalt surface and vary in percent of slope, many exceeding twenty (20) percent. Several of these roads extend up through the winding passageways in the hills providing access to remote, affluent housing subdivisions. The majority of these roads are private with no established maintenance program. During inclement weather, these roads are subject to rock and mudslides, as well as down trees, obstructing all vehicle traffic. It is anticipated

that during an earthquake, several of these roads would be unpassable so as to prevent fire protection resources from reaching fires cause by gas line ruptures or other sources.

3. Topographic

(a) Conditions

i. Vegetation

There are large areas of grasses, bay and oak trees, and chaparral and non-native eucalyptus trees throughout the County. Expansion of the residential community into areas of heavier vegetation has resulted in homes existing in close proximity to dense natural foliage. Often such dwellings are completed surrounded by highly combustible vegetation compounding the fire problem from a conflagration point of view.

Highly combustible dry grass, weeds, and brush are common in the hilly and open space areas adjacent to built-up locations six (6) to eight (8) months of each year. Many of these areas frequently experience wildland fires, which threaten nearby buildings, particularly those with wood roofs, or sidings. This condition can be found throughout Contra Costa County, especially in those developed and developing areas of the County. Earthquake gas fires due to gas line ruptures can ignite grasslands and stress fire district resources.

ii. Surface Features

The County is a conglomeration of bay plains, hills, valleys and ridges. These conditions are found in every city and community. In the West and Central portions, the majority of residential development is on hillsides with slopes ranging up to 30%. In the East portion, residential development is occurring on the relatively flat lands and the area is filling out, with development experiencing the extension into the hillsides. The arrangement and location of natural and manmade surface features, including hills, creeks, canals, freeways, housing tracts, commercial development, fire stations, streets and roads, combine to limit feasible response routes for Fire District resources in and to District areas.

iii. Buildings, Landscaping and Terrain

Numerous structures have shingle or shake roofs. This very flammable material is susceptible to ignition by embers from a wildland fire, furthering the spread of fire to adjacent buildings.

Many of the newer large buildings and building complexes have building access and landscaping features and designs, which preclude or greatly limit any approach or operational access to them by Fire District vehicles. In addition, the presence of security gates and roads of inadequate width and grades that are too steep for Fire District vehicles adversely effect fire suppression efforts.

When Fire District vehicles cannot gain access to buildings involved with fire, the potential for complete loss is realized. Difficulty reaching a fire site often requires that fire personnel both in numbers and in stamina. Access problems often result in severely delaying, misdirecting or making impossible fire and smoke control efforts. In existing structures where pitch roofs have been built over an existing roof, smoke detectors should be required to warn residents of smoke and fire before the arrival of fire personnel.

(b) Impact

The above local geological and topographical conditions increase the magnitude, exposure, accessibility problems, and fire hazards presented to the County fire resources. Fire following an earthquake has the potential of causing greater loss of life and damage than the earthquake itself. Most earthquake fires are created by natural gas developed from gas line ruptures. Hazardous materials, particularly toxic gases, could pose the greatest threat to the largest number, should a significant seismic event occur. Public safety resources would have to be prioritized to mitigate the greatest threat, and may likely be unavailable for smaller single dwellings that were caused by broken gas lines.

The County has a varied topography and vegetative cover. A conglomeration of flat lands, hills, and ridges make up the terrain. Development has occurred on the flat lands in the County and in the past 15 years development has spread into the hills, valleys and ridge lands of the County.

Developments are generally serviced by single access points with emergency vehicle only access statically located. The hilly portions are served by roads which may be in excess of 15% grade. The roadway system is for the most part a grid or loop system. Roadways with less than 20 feet of unobstructed paved surface, with a dead end longer than 150 feet, a cul-de-sac diameter less than 90 feet or grade of more than 15% are considered hazardous in terms of fire access and protection. A large number of roadways within the County fall into one of the above categories.

The refineries, chemical facilities and power generating facilities located within the County and within Seismic Risk Zone 4 pose the largest single risk. The largest concentrations of hazardous materials are found here. Hazardous materials, particularly toxic gases, could pose the greatest threat to the largest number, should a significant seismic event occur. Fire District resources would have to be prioritized to mitigate the greatest threats and may be unavailable for smaller single-dwelling or structure fires and emergencies.

Other variables may tend to intensify the situation:

1. The extent of damage to the water system
2. The extent of isolation due to bridge and/or freeway overpass collapse.
3. The extent of roadway damage and/or amount of debris blocking the roadways.
4. Climatic condition (hot, dry weather with high winds).
5. Time of day will influence the amount of traffic on roadways and could intensify the risk to life during normal business hours.
6. The availability of timely mutual aid or military assistance.
7. The large portion of dwellings with wood shake or shingle coverings (both on the roof diaphragm and sides of the dwellings) could result in conflagrations.
8. The large number of dwellings that slip off their foundations and rupture gas lines and electrical systems resulting in further conflagrations.

NECESSITY OF MORE RESTRICTIVE STANDARDS. The above climatic, geological, and topographic conditions impact fire prevention efforts and the frequency, spread, acceleration, intensity and size of fire involving buildings located throughout the jurisdiction. Further, the conditions impact potential damage to all structures from earthquake and subsequent fire. Therefore, because

of the conditions described above, the Board of Directors of the Crockett-Carquinez Fire Protection District, the Contra Costa County Fire Protection District, and the East Contra Costa Fire Protection District finds that there are building and fire hazards unique to Contra Costa County that required the more restrictive fire protection and building standards set forth in Ordinance No. 2007-47. The following table indicates code sections that have been modified pursuant to Ordinance No. 2007-47, and the local climatic, geological and topographical conditions requiring the modifications.

Code Section	Local Conditions
317.2.4	Climatic, Topographic
503.1.1(2)	Climatic, Topographic
503.1.2.1	Climatic, Geological, Topographic
503.2.1.1	Climatic, Geological, Topographic
503.2.7	Climatic, Geological, Topographic
508.1.1	Geological, Topographic
603.6.6	Geological, Topographic
903.2 thru 903.2.10	Climatic, Geological, Topographic
Table 903.2	Climatic, Geological, Topographic
903.6.2	Climatic, Geological, Topographic
903.6.3	Climatic, Geological, Topographic
1410.1	Geological, Topographic
1412.1	Climatic,
102.1	Climatic, Geological, Topographic
Appendix Chapter 1	Climatic, Geological, Topographic
Appendix Chapter 4	Climatic, Geological, Topographic
Appendix B	Geological, Topographic
Appendix C	Geological, Topographic
Appendix D	Climatic, Geological, Topographic

Sinnette, Christine

From: brandtand@aol.com
Sent: Sunday, March 02, 2008 11:00 AM
To: Robbins, Joanne
Cc: Falk, Steven; Sinnette, Christine
Subject: Ordinance 571

Joanne --
Please pass this along to the City Council regarding Item 10.C on the draft agenda.

Agenda Item 10.C: Ordinance 571
As you will recall, when adoption of this fire ordinance came up, I asked that we consider adding sprinkler provisions for new residential structures, and the Council was kind enough to continue the matter to March 10 to consider that possibility. I will be out of town on March 10, but I want to provide some comments on the item.

I had extensive conversations with Tonya Hoover, former Fire Marshal for Orinda and Moraga and now the assistant State Fire Marshal, and Richard Carpenter, Contra Costa Consolidated Fire District.

Ms. Hoover reviewed the history of the Orinda and Moraga residential sprinkler ordinances, beginning with the fire ordinance developed by the Orinda Planning Commission and Fire District in the late 1980's, the impetus for action provided by the 1991 Oakland Hills fire (and the concurrent Orinda hills fires), and the more recent modifications instituted by Orinda and Moraga.
Orinda and Moraga now have slightly different residential sprinkler ordinances. Both require sprinklers in all new residential construction. They also require sprinklers in remodels of 50% or more of a residential building or remodels which cause a building to exceed 6200 square feet. The minor differences come in exceptions to the last requirement.
With respect to jurisdiction and enforcement, standard ordinances are provided for our adoption, but cities are permitted to adopt stronger provisions, either by amendment of the ordinance or by adoption of a separate ordinance. The ordinances identify the enforcement agency, typically the local fire district.
She noted that water supply and water meter issues can be worked out with EBMUD. They have been quite cooperative in removing administrative or technical obstructions to attempts to encourage sprinklers.
She also noted that sprinklers are first and foremost a life safety issue. They are installed to allow residents to escape from a fire, and to minimize the risks to firefighters. The fact that they also save buildings is a marvelous side benefit.

Mr. Carpenter was equally enthusiastic about my desire (and I hope the full Council's desire) to expand the use of residential sprinklers. He reiterated Ms. Hoover's comment that it is an excellent way to reduce firefighter casualties.
He noted that he is now working on a County residential sprinkler ordinance, to be offered to cities as a stand-alone ordinance, very similar to the Orinda and Moraga ordinances. He prefers a stand-alone ordinance because when fire codes are periodically reissued for adoption (I believe every 3 years), cities would not have to amend that code each time. He indicated that his ordinance would be ready for distribution and adoption within a matter of

weeks.

Both Ms. Hoover and Mr. Carpenter offered to attend our meetings to explain and clarify the issues and benefits of residential sprinklers, and would assist in obtaining the participation of other County and State officials, if that would be useful.

Given the expectation that the County will shortly be providing a comprehensive residential sprinkler ordinance, I encourage the Council to act on Ordinance 571 at the March 10 meeting without residential sprinkler modifications, with the expectation that we will shortly take up the separate residential sprinkler ordinance being developed for the County by Mr. Carpenter.

-- Brandt Andersson

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